Mathematica 11.3 Integration Test Results

Test results for the 35 problems in "1.1.1.7 P(x) (a+b x)^m (c+d x)^n (e+f x)^p (g+h x)^q.m"

Problem 1: Result unnecessarily involves complex numbers and more than twice size of optimal antiderivative.

$$\int \frac{(a+b\,x)^2\,(A+B\,x)}{\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 700 leaves, 9 steps):

$$\frac{1}{15\,d^2\,f^2\,h^2}2\,b\,\left(7\,a\,B\,d\,f\,h+b\,\left(5\,A\,d\,f\,h-4\,B\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}+\frac{2\,b\,B\,\left(a+b\,x\right)\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{5\,d\,f\,h}+$$

$$\left(2\sqrt{-d\,e+c\,f}\,\left(15\,a^2\,B\,d^2\,f^2\,h^2+10\,a\,b\,d\,f\,h\,\left(3\,A\,d\,f\,h-2\,B\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)-b^2\,\left(10\,A\,d\,f\,h\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)-B\,\left(8\,c^2\,f^2\,h^2+7\,c\,d\,f\,h\,\left(f\,g+e\,h\right)+d^2\,\left(8\,f^2\,g^2+7\,e\,f\,g\,h+8\,e^2\,h^2\right)\right)\right)\right)\sqrt{\frac{d\,\left(e+f\,x\right)}{d\,e-c\,f}}\,\sqrt{g+h\,x}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{\left(d\,e-c\,f\right)\,h}{f\,\left(d\,g-c\,h\right)}\right]\right)\Big/$$

$$\left(15\,d^3\,f^{5/2}\,h^3\,\sqrt{e+f\,x}\,\sqrt{\frac{d\,\left(g+h\,x\right)}{d\,g-c\,h}}\right)-\frac{1}{15\,d^3\,f^{5/2}\,h^3\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}$$

$$2\sqrt{-d\,e+c\,f}\,\left(15\,a^2\,d^2\,f^2\,h^2\,\left(B\,g-A\,h\right)+10\,a\,b\,d\,f\,h\,\left(3\,A\,d\,f\,g\,h-B\,\left(c\,h\,\left(f\,g-e\,h\right)+d\,g\,\left(2\,f\,g+e\,h\right)\right)\right)-b^2\,\left(5\,A\,d\,f\,h\,\left(c\,h\,\left(f\,g-e\,h\right)+d\,g\,\left(2\,f\,g+e\,h\right)\right)-B\,\left(4\,c^2\,f\,h^2\,\left(f\,g-e\,h\right)+c\,d\,h\,\left(3\,f^2\,g^2+e\,f\,g\,h-4\,e^2\,h^2\right)+d^2\,g\,\left(8\,f^2\,g^2+3\,e\,f\,g\,h+4\,e^2\,h^2\right)\right)\right)\right)\sqrt{\frac{d\,\left(e+f\,x\right)}{d\,e-c\,f}}\,\sqrt{\frac{d\,\left(g+h\,x\right)}{d\,g-c\,h}}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{\left(d\,e-c\,f\right)\,h}{f\,\left(d\,g-c\,h\right)}\right]$$

Result (type 4, 12443 leaves):

$$\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\left(\frac{2\,b\,\left(-4\,b\,B\,d\,f\,g-4\,b\,B\,d\,e\,h-4\,b\,B\,c\,f\,h+5\,A\,b\,d\,f\,h+10\,a\,B\,d\,f\,h\right)}{15\,d^2\,f^2\,h^2}+\frac{2\,b^2\,B\,x}{5\,d\,f\,h}\right)$$

$$\sqrt{g+h\,x}+\frac{1}{15\,d^4\,f^2\,h^2}\left(\frac{1}{f\,h\,\sqrt{e+\frac{(c+d\,x)\,\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\,\sqrt{g+\frac{(c+d\,x)\,\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}}\right.$$

$$2\,\left(8\,b^2\,B\,d^2\,f^2\,g^2+7\,b^2\,B\,d^2\,e\,f\,g\,h+7\,b^2\,B\,c\,d\,f^2\,g\,h-10\,A\,b^2\,d^2\,f^2\,g\,h-20\,a\,b\,B\,d^2\,f^2\,g\,h+8\,b^2\,B\,d^2\,e^2\,h^2+7\,b^2\,B\,c\,d\,e\,f\,h^2-10\,A\,b^2\,d^2\,e\,f\,h^2-20\,a\,b\,B\,d^2\,e\,f\,h^2+8\,b^2\,B\,c^2\,f^2\,h^2-10\,A\,b^2\,c\,d\,f^2\,h^2-20\,a\,b\,B\,c\,d\,f^2\,h^2+30\,a\,A\,b\,d^2\,f^2\,h^2+15\,a^2\,B\,d^2\,f^2\,h^2\right)\,(c+d\,x)^{3/2}$$

$$\left(f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)-\frac{1}{f\,h\,\sqrt{e+\frac{(c+d\,x)\,\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\,\sqrt{g+\frac{(c+d\,x)\,\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}}$$

$$2\,(c+d\,x)\,\sqrt{\left(f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}$$

$$\left(\left(\left(8\,i\,b^2\,B\,d^4\,e\,f^2\,g^3\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(8\,i\,b^2\,B\,c\,d^3\right.$$

$$f^3\,g^3\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\right.\right.$$

$$\left.\left.\left.\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+\left(7 i b^2 B d^4 e^2\right.$$

$$f g^2 h^2\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.$$

$$\left.\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(8 i b^2 B c d^3\right.$$

$$e f^2 g^2 h^2\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.$$

$$\left.\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(10 i A b^2 d^4 e f^2 g^2 h^2\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left.\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.\right.$$

$$\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\Bigg)\Bigg) \Bigg/$$

$$\left(\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}\ \left(-\text{d g}+\text{c h}\right)\sqrt{\left(\text{f}+\frac{\text{d e}-\text{c f}}{\text{c}+\text{d x}}\right)\left(\text{h}+\frac{\text{d g}-\text{c h}}{\text{c}+\text{d x}}\right)}\right) -$$

$$\left(20\ \text{i a b B d}^4\ \text{e f}^2\ \text{g}^2\ \text{h}^2\sqrt{1-\frac{-\text{d e}+\text{c f}}{\text{f}\left(\text{c}+\text{d x}\right)}}\sqrt{1-\frac{-\text{d g}+\text{c h}}{\text{h}\left(\text{c}+\text{d x}\right)}}\right.$$

$$\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right] -\right.$$

$$\left.\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\right)\Bigg) \Bigg/$$

$$\left(\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}\ \left(-\text{d g}+\text{c h}\right)\sqrt{\left(\text{f}+\frac{\text{d e}-\text{c f}}{\text{c}+\text{d x}}\right)\left(\text{h}+\frac{\text{d g}-\text{c h}}{\text{c}+\text{d x}}\right)}\right) +$$

$$\left(\text{i b}^2\ \text{B c}^2\ \text{d}^2\ \text{f}^3\ \text{g}^2\ \text{h}^2\sqrt{1-\frac{-\text{d e}+\text{c f}}{\text{f}\left(\text{c}+\text{d x}\right)}}\sqrt{1-\frac{-\text{d g}+\text{c h}}{\text{h}\left(\text{c}+\text{d x}\right)}}\right.$$

$$\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right] -\right.$$

$$\left.\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\right)\Bigg) \Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(10\,i\,A\,b^2\,c\,d^3\,f^3\,g^2\,h^2\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(20\,i\,a\,b\,B\,c\,d^3\,f^3\,g^2\,h^2\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(8\,i\,b^2\,B\,d^4\,e^3\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(8\,i\,b^2\,B\,c\,d^3\,e^2\,f\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(10\,i\,A\,b^2\,d^4\,e^2\,f\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(20\,i\,a\,b\,B\,d^4\,e^2\,f\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\right)\right)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,b^2\,B\,c^2\,d^2\,e\,f^2\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\right)\right)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(10\,i\,A\,b^2\,c\,d^3\,e\,f^2\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(20\,i\,a\,b\,B\,c\,d^3\,e\,f^2\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(30\,i\,a\,A\,b\,d^4\,e\,f^2\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(15\,i\,a^2\,B\,d^4\,e\,f^2\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\,b^2\,B\,c^3\,d\,f^3\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\right.\right.\right.$$

$$\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] - \text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\Bigg(\sqrt{-\frac{-d e+c f}{f}}\,\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\Bigg) -$$

$$\Bigg(30\,i\,a\,A\,b\,c\,d^3\,f^3\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] -$$

$$\text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\Bigg(\sqrt{-\frac{-d e+c f}{f}}\,\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\Bigg) -$$

$$\Bigg(15\,i\,a^2\,B\,c\,d^3\,f^3\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] -$$

$$\text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(8 i b^2 B c d^3 e^3 h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(i b^2 B c^2 d^2 e^2 f h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(10 i A b^2 c d^3 e^2 f h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left.\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.\right.$$

$$\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\Bigg)\Bigg) \Bigg/$$

$$\left(\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}\ \left(-\text{d g}+\text{c h}\right)\sqrt{\left(\text{f}+\frac{\text{d e}-\text{c f}}{\text{c}+\text{d x}}\right)\left(\text{h}+\frac{\text{d g}-\text{c h}}{\text{c}+\text{d x}}\right)}\right)+$$

$$\left(20\,\text{i a b B c d}^3\,\text{e}^2\,\text{f h}^4\sqrt{1-\frac{-\text{d e}+\text{c f}}{\text{f}\left(\text{c}+\text{d x}\right)}}\sqrt{1-\frac{-\text{d g}+\text{c h}}{\text{h}\left(\text{c}+\text{d x}\right)}}\right.$$

$$\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]-\right.$$

$$\left.\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\right)\Bigg) \Bigg/$$

$$\left(\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}\ \left(-\text{d g}+\text{c h}\right)\sqrt{\left(\text{f}+\frac{\text{d e}-\text{c f}}{\text{c}+\text{d x}}\right)\left(\text{h}+\frac{\text{d g}-\text{c h}}{\text{c}+\text{d x}}\right)}\right)-$$

$$\left(\text{i b}^2\,\text{B c}^3\,\text{d e f}^2\,\text{h}^4\sqrt{1-\frac{-\text{d e}+\text{c f}}{\text{f}\left(\text{c}+\text{d x}\right)}}\sqrt{1-\frac{-\text{d g}+\text{c h}}{\text{h}\left(\text{c}+\text{d x}\right)}}\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]-\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\right)\Bigg) \Bigg/$$

$$\left(\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}\ \left(-\text{d g}+\text{c h}\right)\sqrt{\left(\text{f}+\frac{\text{d e}-\text{c f}}{\text{c}+\text{d x}}\right)\left(\text{h}+\frac{\text{d g}-\text{c h}}{\text{c}+\text{d x}}\right)}\right)-$$

$$\left(30\,i\,a\,A\,b\,c\,d^3\,e\,f^2\,h^4\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(15\,i\,a^2\,B\,c\,d^3\,e\,f^2\,h^4\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(8\,i\,b^2\,B\,c^4\,f^3\,h^4\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\right.\right.\right.$$

$$\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] - \text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\Bigg(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\Bigg) -$$

$$\Bigg(10\,i\,A\,b^2\,c^3\,d\,f^3\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] -$$

$$\text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\Bigg(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\Bigg) -$$

$$\Bigg(20\,i\,a\,b\,B\,c^3\,d\,f^3\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] -$$

$$\text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(30\,i\,a\,A\,b\,c^2\,d^2\,f^3\,h^4\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(15\,i\,a^2\,B\,c^2\,d^2\,f^3\,h^4\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(4\,i\,b^2\,B\,d^3\,e\,f^2\,g^2\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(4\,i\,b^2\,B\,c\,d^2\,f^3\,g^2\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(4\,i\,b^2\,B\,d^3\,e^2\,f\,g\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\, b^2\, B\, c\, d^2\, e\, f^2\, g\, h^2 \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right) \Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right) +$$

$$\left(5\,i\,A\,b^2\,d^3\,e\,f^2\,g\,h^2 \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right) \Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right) +$$

$$\left(10\,i\,a\,b\,B\,d^3\,e\,f^2\,g\,h^2 \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right) \Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right) +$$

$$\left(3\,i\,b^2\,B\,c^2\,d\,f^3\,g\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(5\,i\,A\,b^2\,c\,d^2\,f^3\,g\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(10\,i\,a\,b\,B\,c\,d^2\,f^3\,g\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(4\,i\,b^2\,B\,c\,d^2\,e^2\,f\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(3\,i\,b^2\,B\,c^2\,d\,e\,f^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(5\,i\,A\,b^2\,c\,d^2\,e\,f^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(10\,i\,a\,b\,B\,c\,d^2\,e\,f^2\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(8\,i\,b^2\,B\,c^3\,f^3\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.$$

$$\left.\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(10\,i\,A\,b^2\,c^2\,d\,f^3\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.$$

$$\left.\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(20\,i\,a\,b\,B\,c^2\,d\,f^3\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.$$

$$\left.\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(30\,i\,a\,A\,b\,c\,d^2\,f^3\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(15\,i\,a^2\,B\,c\,d^2\,f^3\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(15\,i\,a^2\,A\,d^3\,f^3\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\right.\right.$$

$$\left.\left.\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\Bigg)\Bigg)$$

Problem 2: Result unnecessarily involves imaginary or complex numbers.

$$\int\frac{(a+b\,x)\,(A+B\,x)}{\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 405 leaves, 8 steps):

$$\frac{2\,b\,B\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{3\,d\,f\,h}+$$

$$\left(2\sqrt{-d\,e+c\,f}\,\left(3\,a\,B\,d\,f\,h+b\left(3\,A\,d\,f\,h-2\,B\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{g+h\,x}\right.$$

$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]\right)\Big/\left(3\,d^2\,f^{3/2}\,h^2\,\sqrt{e+f\,x}\,\sqrt{\frac{d\,(g+h\,x)}{d\,g-c\,h}}\right)-$$

$$\left(2\sqrt{-d\,e+c\,f}\,\left(3\,a\,d\,f\,h\,(B\,g-A\,h)+b\left(3\,A\,d\,f\,g\,h-B\left(c\,h\,(f\,g-e\,h)+d\,g\,(2\,f\,g+e\,h)\right)\right)\right)\right.$$

$$\left.\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{\frac{d\,(g+h\,x)}{d\,g-c\,h}}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]\right)\Big/$$

$$\left(3\,d^2\,f^{3/2}\,h^2\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)$$

Result (type 4, 450 leaves):

$$\frac{1}{3\,d^3\,f^2\,h^2\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\sqrt{c+d\,x}\left(2\,b\,B\,d^2\,f\,h\,(e+f\,x)\,(g+h\,x)-\frac{1}{c+d\,x}\right.$$

$$2\,d^2\left(-3\,A\,b\,d\,f\,h-3\,a\,B\,d\,f\,h+2\,b\,B\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)(e+f\,x)\,(g+h\,x)+\frac{1}{\sqrt{-c+\frac{d\,e}{f}}}$$

$$2\,i\,(d\,e-c\,f)\,h\left(3\,A\,b\,d\,f\,h+3\,a\,B\,d\,f\,h-2\,b\,B\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\sqrt{c+d\,x}\,\sqrt{\frac{d\,(e+f\,x)}{f\,(c+d\,x)}}$$

$$\sqrt{\frac{d\,(g+h\,x)}{h\,(c+d\,x)}}\,\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]+\frac{1}{\sqrt{-c+\frac{d\,e}{f}}}$$

$$2\,i\,d\,h\left(3\,a\,d\,f\left(-B\,e+A\,f\right)h+b\left(-3\,A\,d\,e\,f\,h+B\,c\,f\left(-f\,g+e\,h\right)+B\,d\,e\left(f\,g+2\,e\,h\right)\right)\right)$$

$$\left.\sqrt{c+d\,x}\,\sqrt{\frac{d\,(e+f\,x)}{f\,(c+d\,x)}}\,\sqrt{\frac{d\,(g+h\,x)}{h\,(c+d\,x)}}\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]\right)$$

Problem 3: Result unnecessarily involves imaginary or complex numbers.

$$\int \frac{A+Bx}{\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}}\,dx$$

Optimal (type 4, 284 leaves, 6 steps):

$$\left(2B\sqrt{-de+cf}\,\sqrt{\frac{d(e+fx)}{de-cf}}\,\sqrt{g+hx}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+dx}}{\sqrt{-de+cf}}\right],\frac{(de-cf)h}{f(dg-ch)}\right]\right)\Big/$$

$$\left(d\sqrt{f}\,h\sqrt{e+fx}\,\sqrt{\frac{d(g+hx)}{dg-ch}}\right)-\left(2\sqrt{-de+cf}\,(Bg-Ah)\sqrt{\frac{d(e+fx)}{de-cf}}\,\sqrt{\frac{d(g+hx)}{dg-ch}}\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+dx}}{\sqrt{-de+cf}}\right],\frac{(de-cf)h}{f(dg-ch)}\right]\right)\Big/\left(d\sqrt{f}\,h\sqrt{e+fx}\,\sqrt{g+hx}\right)$$

Result (type 4, 319 leaves):

$$-\left(\left(2\left(-Bd^2\sqrt{-c+\frac{de}{f}}\,(e+fx)\,(g+hx)-i\,B\,(de-cf)\,h\,(c+dx)^{3/2}\sqrt{\frac{d(e+fx)}{f(c+dx)}}\,\sqrt{\frac{d(g+hx)}{h(c+dx)}}\right.\right.\right.$$

$$\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{de}{f}}}{\sqrt{c+dx}}\right],\frac{dfg-cfh}{deh-cfh}\right]+i\,d\,(Be-Af)\,h\,(c+dx)^{3/2}$$

$$\left.\left.\left.\sqrt{\frac{d(e+fx)}{f(c+dx)}}\,\sqrt{\frac{d(g+hx)}{h(c+dx)}}\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{de}{f}}}{\sqrt{c+dx}}\right],\frac{dfg-cfh}{deh-cfh}\right]\right)\right)\Big/$$

$$\left(d^2\sqrt{-c+\frac{de}{f}}\,fh\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}\right)$$

Problem 4: Result unnecessarily involves imaginary or complex numbers.

$$\int \frac{A+Bx}{(a+bx)\,\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}}\,dx$$

Optimal (type 4, 313 leaves, 9 steps):

$$\left(2\,B\,\sqrt{-d\,e+c\,f}\,\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{\frac{d\,(g+h\,x)}{d\,g-c\,h}}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\,\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]\right)\Big/$$
$$\left(b\,d\,\sqrt{f}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)-$$
$$\left(2\left(A-\frac{a\,B}{b}\right)\sqrt{-d\,e+c\,f}\,\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{\frac{d\,(g+h\,x)}{d\,g-c\,h}}\,\text{EllipticPi}\left[-\frac{b\,(d\,e-c\,f)}{(b\,c-a\,d)\,f},\right.\right.$$
$$\left.\left.\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\,\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,\sqrt{f}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)$$

Result (type 4, 244 leaves):

$$\left(2\,i\,\sqrt{e+f\,x}\,\sqrt{\frac{d\,(g+h\,x)}{h\,(c+d\,x)}}\left(b\,(-B\,c+A\,d)\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]+\right.\right.$$
$$\left.\left.(-A\,b+a\,B)\,d\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,f}{b\,(-d\,e+c\,f)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]\right)\right)\Big/$$
$$\left(b\,(-b\,c+a\,d)\,\sqrt{-c+\frac{d\,e}{f}}\,f\,\sqrt{\frac{d\,(e+f\,x)}{f\,(c+d\,x)}}\,\sqrt{g+h\,x}\right)$$

Problem 5: Result unnecessarily involves complex numbers and more than twice size of optimal antiderivative.

$$\int\frac{A+B\,x}{(a+b\,x)^2\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 678 leaves, 12 steps):

$$-\frac{b\,(Ab-aB)\,\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{(bc-ad)\,(be-af)\,(bg-ah)\,(a+bx)}+\left((Ab-aB)\,\sqrt{f}\,\sqrt{-de+cf}\,\sqrt{\frac{d\,(e+fx)}{de-cf}}\,\sqrt{g+hx}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+dx}}{\sqrt{-de+cf}}\right],\frac{(de-cf)\,h}{f\,(dg-ch)}\right]\right)\Big/$$

$$\left((bc-ad)\,(be-af)\,(bg-ah)\,\sqrt{e+fx}\,\sqrt{\frac{d\,(g+hx)}{dg-ch}}-\left((Ab-aB)\,\sqrt{f}\,\sqrt{-de+cf}\,\sqrt{\frac{d\,(e+fx)}{de-cf}}\,\sqrt{\frac{d\,(g+hx)}{dg-ch}}\right.\right.$$

$$\left.\left.\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+dx}}{\sqrt{-de+cf}}\right],\frac{(de-cf)\,h}{f\,(dg-ch)}\right]\right)\right)\Big/$$

$$\left(b\,(bc-ad)\,(be-af)\,\sqrt{e+fx}\,\sqrt{g+hx}\right)+$$

$$\left(\sqrt{-de+cf}\,\left(3a^2Abdfh-a^3Bdfh-b^3\left(2Bceg-A\left(deg+cfg+ceh\right)\right)+\right.\right.$$

$$\left.\left.ab^2\left(B\left(deg+cfg+ceh\right)-2A\left(dfg+deh+cfh\right)\right)\right)\sqrt{\frac{d\,(e+fx)}{de-cf}}\right.$$

$$\left.\sqrt{\frac{d\,(g+hx)}{dg-ch}}\,\text{EllipticPi}\left[-\frac{b\,(de-cf)}{(bc-ad)\,f},\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+dx}}{\sqrt{-de+cf}}\right],\frac{(de-cf)\,h}{f\,(dg-ch)}\right]\right)\Big/$$

$$\left(b\,(bc-ad)^2\,\sqrt{f}\,(be-af)\,(bg-ah)\,\sqrt{e+fx}\,\sqrt{g+hx}\right)$$

Result (type 4, 14516 leaves):

$$-\frac{b\,(Ab-aB)\,\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{(bc-ad)\,(be-af)\,(bg-ah)\,(a+bx)}-$$

$$\frac{1}{d\,(-bc+ad)\,(-be+af)\,(-bg+ah)}\left(\frac{(Ab-aB)\,(c+dx)^{3/2}\left(f+\frac{de}{c+dx}-\frac{cf}{c+dx}\right)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{\sqrt{e+\frac{(c+dx)\left(f-\frac{cf}{c+dx}\right)}{d}}\,\sqrt{g+\frac{(c+dx)\left(h-\frac{ch}{c+dx}\right)}{d}}}+\right.$$

$$\left((c+dx)\left(-b+\frac{bc}{c+dx}-\frac{ad}{c+dx}\right)\sqrt{f+\frac{de}{c+dx}-\frac{cf}{c+dx}}\,\sqrt{h+\frac{dg}{c+dx}-\frac{ch}{c+dx}}\right.$$

$$\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)}$$

$$\left(\left((b\,c-a\,d)\,h\,\left(-2\,b\,B\,e\,g+A\,b\,f\,g+a\,B\,f\,g+A\,b\,e\,h+a\,B\,e\,h-2\,a\,A\,f\,h\right)\right)\Big/\right.$$

$$\left(\left(-b\,g+a\,h\right)\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}\right)-$$

$$\frac{(A\,b-a\,B)\,(d\,e-c\,f)\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}+$$

$$\left(\left(2\,b^3\,B\,c\,e\,g-A\,b^3\,d\,e\,g-a\,b^2\,B\,d\,e\,g-A\,b^3\,c\,f\,g-a\,b^2\,B\,c\,f\,g+2\,a\,A\,b^2\,d\,f\,g-\right.\right.$$

$$\left.\left.A\,b^3\,c\,e\,h-a\,b^2\,B\,c\,e\,h+2\,a\,A\,b^2\,d\,e\,h+2\,a\,A\,b^2\,c\,f\,h-3\,a^2\,A\,b\,d\,f\,h+a^3\,B\,d\,f\,h\right)$$

$$\left.\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}\right)\Big/\left(\left(-b\,g+a\,h\right)\left(b-\frac{b\,c}{c+d\,x}+\frac{a\,d}{c+d\,x}\right)\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}\right)\Bigg)$$

$$\left(\left(\left(i\,A\,b\,d^2\,e\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\right)\Big/$$

$$\left((b\,c-a\,d)\,(-d\,e+c\,f)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)\right)-\left(i\,a\,B\,d^2\,e\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.$$

$$\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]-\right.$$

$$\left.\text{EllipticF}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left((b c-a d)(-d e+c f)\right.$$

$$\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\right)}-$$

$$\left(i A b c d f^2 g \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(-d e+c f) h}{f (-d g+c h)}\right]-\text{EllipticF}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\right) \Big/$$

$$\left((b c-a d)(-d e+c f) \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g+d e h-2 c f h}{c+d x}\right)}+\left(i a B c d f^2 g \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\right.\right.$$

$$\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left((b c-a d)(-d e+c f)\right.\right.$$

$$\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\right)}-$$

$$\left(i A b c d e f h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(-d e+c f) h}{f (-d g+c h)}\right]-\text{EllipticF}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\right)\Big/$$

$$\left((b c-a d)\ (-d e+c f)\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\right.}\right.$$

$$\left.\left.\frac{d f g+d e h-2 c f h}{c+d x}\right)\right)+\left(i a B c d e f h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\right.$$

$$\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\right)\Big/\left((b c-a d)\ (-d e+c f)\right.$$

$$\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\right)}+$$

$$\left(i A b c^2 f^2 h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big] - \text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\Big],\ \frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big]\Bigg)\Bigg)\Bigg/$$

$$\Bigg((bc-ad)\,(-de+cf)\sqrt{-\frac{-dg+ch}{h}}\,\sqrt{\left(fh+\frac{d^2eg-cdfg-cdeh+c^2fh}{(c+dx)^2}+\right.$$

$$\left.\frac{dfg+deh-2cfh}{c+dx}\right)}-\Bigg(iaBc^2f^2h\sqrt{1-\frac{-de+cf}{f\,(c+dx)}}$$

$$\sqrt{1-\frac{-dg+ch}{h\,(c+dx)}}\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\Big],\ \frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big]-$$

$$\text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\Big],\ \frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big]\Bigg)\Bigg)\Bigg/\Bigg((bc-ad)\,(-de+cf)$$

$$\sqrt{-\frac{-dg+ch}{h}}\,\sqrt{\left(fh+\frac{d^2eg-cdfg-cdeh+c^2fh}{(c+dx)^2}+\frac{dfg+deh-2cfh}{c+dx}\right)}-$$

$$\Bigg(iAb^2d^2eg\sqrt{1-\frac{-de+cf}{f\,(c+dx)}}\,\sqrt{1-\frac{-dg+ch}{h\,(c+dx)}}\,\text{EllipticF}\Big[$$

$$i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\Big],\ \frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big]\Bigg)\Bigg/\Bigg((bc-ad)^2\sqrt{-\frac{-dg+ch}{h}}$$

$$\sqrt{\left(fh+\frac{d^2eg-cdfg-cdeh+c^2fh}{(c+dx)^2}+\frac{dfg+deh-2cfh}{c+dx}\right)}+$$

$$\left(i\,a\,b\,B\,d^2\,e\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,b\,B\,d\,e\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,A\,b^2\,c\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\,a\,b\,B\,c\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,A\,b\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,A\,b^2\,c\,d\,e\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\,a\,b\,B\,c\,d\,e\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,A\,b\,d\,e\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\,A\,b^2\,c^2\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,a\,b\,B\,c^2\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,A\,b\,c\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,a\,B\,c\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,a\,A\,d\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\Big[\,i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\right)\Big/\left((b\,c-a\,d)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+\frac{1}{(b\,c-a\,d)^3}$$

$$A\,b^3\,d^2\,e\,g\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\Big[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)}\right)-\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\Big[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)}\right)\right)-\frac{1}{(b\,c-a\,d)^3}$$

$$a\,b^2\,B\,d^2\,e\,g\left(\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-\right.$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\right.\right.$$

$$\left.\left.\left.\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)-\frac{1}{(b\,c-a\,d)^2}$$

$$2\,b^2\,B\,d\,e\,g\left(\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-\right.$$

$$\left(\text{i}\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\Big[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,\text{i}\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)}\right)-\frac{1}{(b\,c-a\,d)^3}$$

$$A\,b^3\,c\,d\,f\,g\left(\left(\text{i}\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\Big[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,\text{i}\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)}\right)-\left(\text{i}\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\Big[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,\text{i}\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\frac{1}{(b c-a d)^3} a b^2 B c d f g \left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{ EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{ EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right] \Big/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)\right)\right)+\frac{1}{(b c-a d)^2}$$

$$2 A b^2 d f g \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{ EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right] \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.\right.$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-$$

$$\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg) \Big/ \Bigg(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)\Bigg)-$$

$$\frac{1}{(b c-a d)^3} A b^3 c d e h \Bigg(\Bigg(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[$$

$$\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big] \Big/$$

$$\Bigg(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+$$

$$\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)\Bigg)-\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}$$

$$\text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big] \Big/$$

$$\left(b\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+\frac{1}{(b c-a d)^3}$$

$$a b^2 B c d e h\left(\left(i c\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\,\text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\right.\right.\right.$$

$$\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\left(i a d\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\,\text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/\left(b\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+$$

$$\frac{1}{(b c-a d)^2}2 A b^2 d e h\left(\left(i c\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\,\text{EllipticPi}\left[\right.\right.\right.$$

$$\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\ i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\ \frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{-\frac{-d\,g+c\,h}{h}}\ \sqrt{\Bigg(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+$$

$$\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\Bigg)\Bigg)-\Bigg(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}$$

$$\text{EllipticPi}\Big[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\ i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\ \frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\ \sqrt{\Bigg(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+$$

$$\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\Bigg)\Bigg)+\frac{1}{(b\,c-a\,d)^3}$$

$$A\,b^3\,c^2\,f\,h\Bigg(\Bigg(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\ \text{EllipticPi}\Big[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},$$

$$i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\ \frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\Bigg)\Bigg/\Bigg(\sqrt{-\frac{-d\,g+c\,h}{h}}\ \sqrt{\Bigg(f\,h+$$

$$\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\Bigg)\Bigg)-$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.$$

$$\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-$$

$$\frac{1}{(b\,c-a\,d)^3}a\,b^2\,B\,c^2\,f\,h\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)-\frac{1}{(b c-a d)^2}$$

$$2 A b^2 c f h\left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)-$$

$$\left(\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.$$

$$\left.\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/\left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.$$

$$\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)+$$

$$\frac{1}{(b c-a d)^2} 2 a b B c f h\left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\right.\right.\right.$$

$$\left.\left.\left.\left[\frac{(b c-a d) h}{b (-d g+c h)},\ i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/\right)$$

$$\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\right.$$

$$\left.\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/$$

$$\left(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)-\frac{1}{(b c-a d)^2}$$

$$2 a A b d f h\left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\right.$$

$$\left.\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/\left(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+$$

$$\frac{1}{b c-a d}A b f h\left(\left(i c\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\right.\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\left(i a d\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/\left(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\frac{1}{b c-a d}a B f h\left(\left(i c\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\right.\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}},\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\right]\Bigg/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\ i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}},\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\right]\Bigg/\left(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)\right)\right)\Bigg/$$

$$\left(\left(A b f h-a B f h+\frac{A b d^2 e g}{(c+d x)^2}-\frac{a B d^2 e g}{(c+d x)^2}-\frac{A b c d f g}{(c+d x)^2}+\frac{a B c d f g}{(c+d x)^2}-\frac{A b c d e h}{(c+d x)^2}+\frac{a B c d e h}{(c+d x)^2}+\frac{A b c^2 f h}{(c+d x)^2}-\frac{a B c^2 f h}{(c+d x)^2}-\frac{2 b B d e g}{c+d x}+\frac{2 A b d f g}{c+d x}+\frac{2 A b d e h}{c+d x}-\frac{2 A b c f h}{c+d x}+\frac{2 a B c f h}{c+d x}-\frac{2 a A d f h}{c+d x}\right)\sqrt{e+\frac{(c+d x)\left(f-\frac{c f}{c+d x}\right)}{d}}\ \sqrt{g+\frac{(c+d x)\left(h-\frac{c h}{c+d x}\right)}{d}}\right)$$

Problem 6: Result more than twice size of optimal antiderivative.

$$\int \frac{(a+b\,x)^{3/2}\,(A+B\,x)}{\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 981 leaves, 10 steps):

$$\frac{1}{4\,d\,f^2\,h^2\,\sqrt{c+d\,x}}\left(5\,a\,B\,d\,f\,h+b\left(4\,A\,d\,f\,h-3\,B\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\sqrt{a+b\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}+\frac{b\,B\,\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{2\,d\,f\,h}-$$

$$\left(\sqrt{d\,g-c\,h}\,\sqrt{f\,g-e\,h}\,\left(5\,a\,B\,d\,f\,h+b\left(4\,A\,d\,f\,h-3\,B\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\sqrt{a+b\,x}\,\sqrt{-\frac{(d\,e-c\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(c+d\,x)}}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d\,g-c\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}}\right],\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(b\,e-a\,f)\,(d\,g-c\,h)}\right]\right)\Big/$$

$$\left(4\,d^2\,f^2\,h^2\sqrt{\frac{(d\,e-c\,f)\,(a+b\,x)}{(b\,e-a\,f)\,(c+d\,x)}}\,\sqrt{g+h\,x}\right)-$$

$$\left(\left(b\,e-a\,f\right)\sqrt{b\,g-a\,h}\,\left(3\,a\,B\,d\,f\,h+b\left(4\,A\,d\,f\,h-B\left(c\,f\,h+3\,d\left(f\,g+e\,h\right)\right)\right)\right)\sqrt{\frac{(b\,e-a\,f)\,(c+d\,x)}{(d\,e-c\,f)\,(a+b\,x)}}\,\sqrt{g+h\,x}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],-\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(d\,e-c\,f)\,(b\,g-a\,h)}\right]\right)\Big/$$

$$\left(4\,b\,d\,f^2\,h^2\,\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{(b\,e-a\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(a+b\,x)}}\right)+$$

$$\frac{1}{4\,b\,d^2\,\sqrt{b\,c-a\,d}\,f^2\,h^3\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}}\sqrt{-d\,g+c\,h}\,\left(4\,d\,f\,h\left(2\,a\left(2\,A\,b+a\,B\right)d\,f\,h-b\,B\left(b\left(d\,e\,g+c\,f\,g+c\,e\,h\right)+a\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)-\left(a\,d\,f\,h+b\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\left(5\,a\,B\,d\,f\,h+b\left(4\,A\,d\,f\,h-3\,B\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\right)$$

$$(a+b\,x)\sqrt{\frac{(b\,g-a\,h)\,(c+d\,x)}{(d\,g-c\,h)\,(a+b\,x)}}\,\sqrt{\frac{(b\,g-a\,h)\,(e+f\,x)}{(f\,g-e\,h)\,(a+b\,x)}}\,\text{EllipticPi}\left[-\frac{b\,(d\,g-c\,h)}{(b\,c-a\,d)\,h},\text{ArcSin}\left[\frac{\sqrt{b\,c-a\,d}\,\sqrt{g+h\,x}}{\sqrt{-d\,g+c\,h}\,\sqrt{a+b\,x}}\right],\frac{(b\,e-a\,f)\,(d\,g-c\,h)}{(b\,c-a\,d)\,(f\,g-e\,h)}\right]$$

Result (type 4, 21 555 leaves): Display of huge result suppressed!

Problem 7: Result more than twice size of optimal antiderivative.

$$\int \frac{\sqrt{a+b\,x}\,\,(A+B\,x)}{\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 736 leaves, 7 steps):

$$\frac{B\sqrt{a+bx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{fh\sqrt{c+dx}} - \left(B\sqrt{dg-ch}\,\sqrt{fg-eh}\,\sqrt{a+bx}\,\sqrt{-\frac{(de-cf)(g+hx)}{(fg-eh)(c+dx)}}\right.$$

$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{dg-ch}\,\sqrt{e+fx}}{\sqrt{fg-eh}\,\sqrt{c+dx}}\right], \frac{(bc-ad)(fg-eh)}{(be-af)(dg-ch)}\right]\right) \Big/$$

$$\left(dfh\sqrt{\frac{(de-cf)(a+bx)}{(be-af)(c+dx)}}\,\sqrt{g+hx}\right) - \left(B(be-af)\sqrt{bg-ah}\,\sqrt{\frac{(be-af)(c+dx)}{(de-cf)(a+bx)}}\right.$$

$$\left.\sqrt{g+hx}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{bg-ah}\,\sqrt{e+fx}}{\sqrt{fg-eh}\,\sqrt{a+bx}}\right], -\frac{(bc-ad)(fg-eh)}{(de-cf)(bg-ah)}\right]\right) \Big/$$

$$\left(bfh\sqrt{fg-eh}\,\sqrt{c+dx}\,\sqrt{-\frac{(be-af)(g+hx)}{(fg-eh)(a+bx)}}\right) +$$

$$\left(\sqrt{-dg+ch}\,\left(2Abdfh+B\left(adfh-b\left(dfg+deh+cfh\right)\right)\right)(a+bx)\sqrt{\frac{(bg-ah)(c+dx)}{(dg-ch)(a+bx)}}\right.$$

$$\sqrt{\frac{(bg-ah)(e+fx)}{(fg-eh)(a+bx)}}\,\text{EllipticPi}\left[-\frac{b(dg-ch)}{(bc-ad)h}, \text{ArcSin}\left[\frac{\sqrt{bc-ad}\,\sqrt{g+hx}}{\sqrt{-dg+ch}\,\sqrt{a+bx}}\right],\right.$$

$$\left.\left.\frac{(be-af)(dg-ch)}{(bc-ad)(fg-eh)}\right]\right) \Big/ \left(bd\sqrt{bc-ad}\,fh^2\sqrt{c+dx}\,\sqrt{e+fx}\right)$$

Result (type 4, 6648 leaves):

$$-\frac{1}{d^2}2\left(-\left(\left(B(c+dx)^{3/2}\left(f+\frac{de}{c+dx}-\frac{cf}{c+dx}\right)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)\sqrt{a+\frac{(c+dx)\left(b-\frac{bc}{c+dx}\right)}{d}}\right) \Big/\right.\right.$$

$$\left.\left.\left(2fh\sqrt{e+\frac{(c+dx)\left(f-\frac{cf}{c+dx}\right)}{d}}\,\sqrt{g+\frac{(c+dx)\left(h-\frac{ch}{c+dx}\right)}{d}}\right)\right) +$$

$$\left(d(bg-ah)(dg-ch)(Bfg+Beh-2Afh)\sqrt{c+dx}\right.$$

$$\left.\sqrt{\left(\left(b-\frac{bc}{c+dx}+\frac{ad}{c+dx}\right)\left(f+\frac{de}{c+dx}-\frac{cf}{c+dx}\right)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)\right)}\right)$$

$$\sqrt{a+\frac{(c+dx)\left(b-\frac{bc}{c+dx}\right)}{d}}\left(\left(de\sqrt{-\frac{(bc-ad)(-dg+ch)\left(-\frac{b}{bc-ad}+\frac{1}{c+dx}\right)}{-bdg+adh}}\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\left(\left((-bdg+adh)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/\left((bc-ad)(-dg+ch)\right)-\frac{1}{bc-ad}b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-\left(cf\sqrt{-\frac{(bc-ad)(-dg+ch)\left(-\frac{b}{bc-ad}+\frac{1}{c+dx}\right)}{-bdg+adh}}\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\left(\left((-bdg+adh)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/\left((bc-ad)(-dg+ch)\right)-\frac{1}{bc-ad}b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)+$$

$$\left(f\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)\Big)\Big/$$

$$\left(2fh^2(fg-eh)\left(b-\frac{bc}{c+dx}+\frac{ad}{c+dx}\right)\sqrt{e+\frac{(c+dx)\left(f-\frac{cf}{c+dx}\right)}{d}}\right.$$

$$\left.\sqrt{g+\frac{(c+dx)\left(h-\frac{ch}{c+dx}\right)}{d}}\right)-$$

$$\left(d(be-af)(de-cf)(Bfg+Beh-2Afh)\sqrt{c+dx}\right.$$

$$\sqrt{\left(\left(b-\frac{bc}{c+dx}+\frac{ad}{c+dx}\right)\left(f+\frac{de}{c+dx}-\frac{cf}{c+dx}\right)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)\right)}$$

$$\sqrt{a+\frac{(c+dx)\left(b-\frac{bc}{c+dx}\right)}{d}}$$

$$\left(\left(dg\sqrt{-\frac{(bc-ad)(-dg+ch)\left(-\frac{b}{bc-ad}+\frac{1}{c+dx}\right)}{-bdg+adh}}\right.\right.$$

$$\left.\left.\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\right.\right.$$

$$\left(\left(\left(-b\,d\,g+a\,d\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\right)-\frac{1}{b\,c-a\,d}b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\,\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\,\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(c\,h\,\sqrt{-\frac{\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\,\left(-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}\right)}{-b\,d\,g+a\,d\,h}}\,\left(-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}\right)\,\sqrt{\frac{-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}}{\frac{f}{-d\,e+c\,f}-\frac{h}{-d\,g+c\,h}}}\left(\left(\left(-b\,d\,g+a\,d\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\right)-\frac{1}{b\,c-a\,d}b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\,\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\,\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(h\,\sqrt{\frac{-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}}{-\frac{b}{b\,c-a\,d}+\frac{h}{-d\,g+c\,h}}}\,\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\,\left(-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-d e+c f)\left(-h-\frac{d g}{c+d x}+\frac{c h}{c+d x}\right)}{d(-f g+e h)}}\right],\ \frac{(b c-a d)(-f g+e h)}{(-d e+c f)(-b g+a h)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}\sqrt{\left(b+\frac{-b c+a d}{c+d x}\right)\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)\Bigg)\Bigg/$$

$$\left(2 f^2 h(f g-e h)\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\sqrt{e+\frac{(c+d x)\left(f-\frac{c f}{c+d x}\right)}{d}}\right.$$

$$\left.\sqrt{g+\frac{(c+d x)\left(h-\frac{c h}{c+d x}\right)}{d}}\right)-$$

$$\frac{1}{2 f^2 h^2\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\sqrt{e+\frac{(c+d x)\left(f-\frac{c f}{c+d x}\right)}{d}}\sqrt{g+\frac{(c+d x)\left(h-\frac{c h}{c+d x}\right)}{d}}}$$

$$(b B d f g+b B d e h+b B c f h-2 A b d f h-a B d f h)$$

$$\sqrt{c+d x}$$

$$\sqrt{\left(\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\left(f+\frac{d e}{c+d x}-\frac{c f}{c+d x}\right)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)\right)}$$

$$\sqrt{a+\frac{(c+d x)\left(b-\frac{b c}{c+d x}\right)}{d}}$$

$$\left(\left(d^2 e g\sqrt{-\frac{(b c-a d)(-d g+c h)\left(-\frac{b}{b c-a d}+\frac{1}{c+d x}\right)}{-b d g+a d h}}\right.\right.$$

$$\left(-\frac{f}{-d e+c f}+\frac{1}{c+d x}\right)\sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}$$

$$\left(\left((-b d g+a d h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(d e-c f)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d(-f g+e h)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(b c-a d)(-f g+e h)}{(-d e+c f)(-b g+a h)}\right]\right)\Bigg/\left((b c-a d)(-d g+c h)\right)-\frac{1}{b c-a d}b\,\text{EllipticF}\left[\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\,\right],\ \frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\Bigg]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-$$

$$\left(cdfg\sqrt{-\frac{(bc-ad)(-dg+ch)\left(-\frac{b}{bc-ad}+\frac{1}{c+dx}\right)}{-bdg+adh}}\right.$$

$$\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}$$

$$\left(\left((-bdg+adh)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\,\right],\right.\right.$$

$$\left.\left.\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/\left((bc-ad)(-dg+ch)\right)-\frac{1}{bc-ad}b\,\text{EllipticF}\Big[$$

$$\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\,\right],\ \frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\Bigg]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-$$

$$\left(cdeh\sqrt{-\frac{(bc-ad)(-dg+ch)\left(-\frac{b}{bc-ad}+\frac{1}{c+dx}\right)}{-bdg+adh}}\right.$$

$$\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}$$

$$\left(\left((-bdg+adh)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\,\right],\right.\right.$$

$$\frac{(b c-a d)\ (-f g+e h)}{(-d e+c f)\ (-b g+a h)}]\Bigg)\Big/\ ((b c-a d)\ (-d g+c h))-\frac{1}{b c-a d}b\,\text{EllipticF}\Big[$$

$$\text{ArcSin}\Big[\sqrt{\frac{(d e-c f)\ \left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d\ (-f g+e h)}}\ ],\ \frac{(b c-a d)\ (-f g+e h)}{(-d e+c f)\ (-b g+a h)}\Big]\Bigg)\Bigg)\Big/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-d e+c f}+\frac{1}{c+d x}}{-\frac{f}{-d e+c f}+\frac{h}{-d g+c h}}}\ \sqrt{\left(b+\frac{-b c+a d}{c+d x}\right)\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\Bigg)+$$

$$\Bigg(c^2 f h\sqrt{-\frac{(b c-a d)\ (-d g+c h)\ \left(-\frac{b}{b c-a d}+\frac{1}{c+d x}\right)}{-b d g+a d h}}$$

$$\left(-\frac{f}{-d e+c f}+\frac{1}{c+d x}\right)\sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}$$

$$\Bigg(\Bigg((-b d g+a d h)\ \text{EllipticE}\Big[\text{ArcSin}\Big[\sqrt{\frac{(d e-c f)\ \left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d\ (-f g+e h)}}\ ],$$

$$\frac{(b c-a d)\ (-f g+e h)}{(-d e+c f)\ (-b g+a h)}\Big]\Bigg)\Big/\ ((b c-a d)\ (-d g+c h))-\frac{1}{b c-a d}b\,\text{EllipticF}\Big[$$

$$\text{ArcSin}\Big[\sqrt{\frac{(d e-c f)\ \left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d\ (-f g+e h)}}\ ],\ \frac{(b c-a d)\ (-f g+e h)}{(-d e+c f)\ (-b g+a h)}\Big]\Bigg)\Bigg)\Big/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-d e+c f}+\frac{1}{c+d x}}{-\frac{f}{-d e+c f}+\frac{h}{-d g+c h}}}\ \sqrt{\left(b+\frac{-b c+a d}{c+d x}\right)\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\Bigg)+$$

$$\Bigg(d f g\sqrt{\frac{-\frac{b}{b c-a d}+\frac{1}{c+d x}}{-\frac{b}{b c-a d}+\frac{h}{-d g+c h}}}\ \sqrt{\frac{-\frac{f}{-d e+c f}+\frac{1}{c+d x}}{-\frac{f}{-d e+c f}+\frac{h}{-d g+c h}}}\ \left(-\frac{h}{-d g+c h}+\frac{1}{c+d x}\right)$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-d e+c f)\ \left(-h-\frac{d g}{c+d x}+\frac{c h}{c+d x}\right)}{d\ (-f g+e h)}}\ ],\ \frac{(b c-a d)\ (-f g+e h)}{(-d e+c f)\ (-b g+a h)}\Big]\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)+$$

$$\left(deh\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-$$

$$\left(2cfh\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-$$

$$\left(f(-dg+ch)\left(-\frac{f}{-de+cf}+\frac{h}{-dg+ch}\right)\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)}{\left(-\frac{f}{-de+cf}+\frac{h}{-dg+ch}\right)^2}}\,\text{EllipticPi}\left[-\frac{-dfg+deh}{(-de+cf)h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/$$

$$\left(\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\Bigg)\Bigg)$$

Problem 9: Result more than twice size of optimal antiderivative.

$$\int \frac{A+B\,x}{(a+b\,x)^{3/2}\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 606 leaves, 7 steps):

$$\frac{2\,(A\,b-a\,B)\,d\,\sqrt{a+b\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{(b\,c-a\,d)\,(b\,e-a\,f)\,(b\,g-a\,h)\,\sqrt{c+d\,x}}-\frac{2\,b\,(A\,b-a\,B)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{(b\,c-a\,d)\,(b\,e-a\,f)\,(b\,g-a\,h)\,\sqrt{a+b\,x}}-$$

$$\Bigg(2\,(A\,b-a\,B)\,\sqrt{d\,g-c\,h}\,\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}\,\sqrt{-\frac{(d\,e-c\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(c+d\,x)}}$$

$$\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d\,g-c\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}}\right],\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(b\,e-a\,f)\,(d\,g-c\,h)}\right]\Bigg)\Big/$$

$$\Bigg((b\,c-a\,d)\,(b\,e-a\,f)\,(b\,g-a\,h)\sqrt{\frac{(d\,e-c\,f)\,(a+b\,x)}{(b\,e-a\,f)\,(c+d\,x)}}\,\sqrt{g+h\,x}\Bigg)+$$

$$\Bigg(2\,(B\,c-A\,d)\sqrt{\frac{(b\,e-a\,f)\,(c+d\,x)}{(d\,e-c\,f)\,(a+b\,x)}}\,\sqrt{g+h\,x}$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],-\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(d\,e-c\,f)\,(b\,g-a\,h)}\right]\Bigg)\Big/$$

$$\Bigg((b\,c-a\,d)\,\sqrt{b\,g-a\,h}\,\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{(b\,e-a\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(a+b\,x)}}\Bigg)$$

Result (type 4, 1749 leaves):

$$-\frac{2\,b\,(A\,b-a\,B)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{(b\,c-a\,d)\,(b\,e-a\,f)\,(b\,g-a\,h)\,\sqrt{a+b\,x}}+\frac{1}{b^2\,(-b\,c+a\,d)\,(-b\,e+a\,f)\,(-b\,g+a\,h)}$$

$$\Bigg(-\Bigg(\Bigg(2\,(A\,b-a\,B)\,(a+b\,x)^{5/2}\left(d+\frac{b\,c}{a+b\,x}-\frac{a\,d}{a+b\,x}\right)\left(f+\frac{b\,e}{a+b\,x}-\frac{a\,f}{a+b\,x}\right)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)\Bigg)\Big/$$

$$\left(\sqrt{c+\frac{(a+bx)\left(d-\frac{ad}{a+bx}\right)}{b}}\sqrt{e+\frac{(a+bx)\left(f-\frac{af}{a+bx}\right)}{b}}\sqrt{g+\frac{(a+bx)\left(h-\frac{ah}{a+bx}\right)}{b}}\right)-$$

$$\frac{1}{\sqrt{c+\frac{(a+bx)\left(d-\frac{ad}{a+bx}\right)}{b}}\sqrt{e+\frac{(a+bx)\left(f-\frac{af}{a+bx}\right)}{b}}\sqrt{g+\frac{(a+bx)\left(h-\frac{ah}{a+bx}\right)}{b}}}2(bc-ad)(be-af)$$

$$(bg-ah)(a+bx)^{3/2}\sqrt{\left(\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)}$$

$$\left(-\left(\left(\left(Ab\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\right.\right.\right.\right.$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-$$

$$\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(aB\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\right.$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.\right.$$

$$\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\Bigg)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\Big],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(B\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-b\,e+a\,f)\,\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\Big],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Bigg)\Big/$$

$$\left.\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)\right)$$

Problem 10: Result more than twice size of optimal antiderivative.

$$\int\frac{A+B\,x}{(a+b\,x)^{5/2}\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 1081 leaves, 8 steps):

$$\left(2 d \left(3 a^3 B d f h + b^3 \left(3 B c e g - 2 A \left(d e g + c f g + c e h\right)\right) - a b^2 \left(B \left(d e g + c f g + c e h\right) - 4 A \left(d f g + d e h + c f h\right)\right) - a^2 b \left(6 A d f h + B \left(d f g + d e h + c f h\right)\right)\right) \sqrt{a + b x} \sqrt{e + f x} \sqrt{g + h x}\right) \Big/ \left(3 \left(b c - a d\right)^2 \left(b e - a f\right)^2 \left(b g - a h\right)^2 \sqrt{c + d x}\right) - \frac{2 b \left(A b - a B\right) \sqrt{c + d x} \sqrt{e + f x} \sqrt{g + h x}}{3 \left(b c - a d\right) \left(b e - a f\right) \left(b g - a h\right) \left(a + b x\right)^{3/2}} - \left(2 b \left(3 a^3 B d f h + b^3 \left(3 B c e g - 2 A \left(d e g + c f g + c e h\right)\right) - a b^2 \left(B \left(d e g + c f g + c e h\right) - 4 A \left(d f g + d e h + c f h\right)\right) - a^2 b \left(6 A d f h + B \left(d f g + d e h + c f h\right)\right)\right) \sqrt{c + d x} \sqrt{e + f x} \sqrt{g + h x}\right) \Big/ \left(3 \left(b c - a d\right)^2 \left(b e - a f\right)^2 \left(b g - a h\right)^2 \sqrt{a + b x}\right) - \left(2 \sqrt{d g - c h} \sqrt{f g - e h} \left(3 a^3 B d f h + b^3 \left(3 B c e g - 2 A \left(d e g + c f g + c e h\right)\right) - a b^2 \left(B \left(d e g + c f g + c e h\right) - 4 A \left(d f g + d e h + c f h\right)\right) - a^2 b \left(6 A d f h + B \left(d f g + d e h + c f h\right)\right)\right) \sqrt{a + b x} \sqrt{-\frac{\left(d e - c f\right) \left(g + h x\right)}{\left(f g - e h\right) \left(c + d x\right)}}\right.$$

$$\left. \text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d g - c h} \sqrt{e + f x}}{\sqrt{f g - e h} \sqrt{c + d x}}\right], \frac{\left(b c - a d\right) \left(f g - e h\right)}{\left(b e - a f\right) \left(d g - c h\right)}\right]\right) \Big/ \left(3 \left(b c - a d\right)^2 \left(b e - a f\right)^2 \left(b g - a h\right)^2 \sqrt{\frac{\left(d e - c f\right) \left(a + b x\right)}{\left(b e - a f\right) \left(c + d x\right)}} \sqrt{g + h x}\right) - \left(2 \left(3 a^2 d \left(B c - A d\right) f h + b^2 \left(3 B c d e g - A \left(2 d^2 e g - c^2 f h + c d \left(f g + e h\right)\right)\right) + a b \left(3 A d^2 \left(f g + e h\right) - B \left(d^2 e g + c^2 f h + 2 c d \left(f g + e h\right)\right)\right)\right) \sqrt{\frac{\left(b e - a f\right) \left(c + d x\right)}{\left(d e - c f\right) \left(a + b x\right)}}\right.$$

$$\left. \sqrt{g + h x} \, \text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b g - a h} \sqrt{e + f x}}{\sqrt{f g - e h} \sqrt{a + b x}}\right], -\frac{\left(b c - a d\right) \left(f g - e h\right)}{\left(d e - c f\right) \left(b g - a h\right)}\right]\right) \Big/ \left(3 \left(b c - a d\right)^2 \left(b e - a f\right) \left(b g - a h\right)^{3/2} \sqrt{f g - e h} \sqrt{c + d x} \sqrt{-\frac{\left(b e - a f\right) \left(g + h x\right)}{\left(f g - e h\right) \left(a + b x\right)}}\right)$$

Result (type 4, 10637 leaves):

$$\sqrt{a + b x} \sqrt{c + d x} \sqrt{e + f x} \sqrt{g + h x} \left(-\frac{2 b \left(A b - a B\right)}{3 \left(b c - a d\right) \left(b e - a f\right) \left(b g - a h\right) \left(a + b x\right)^2} - \left(2 b \left(3 b^3 B c e g - 2 A b^3 d e g - a b^2 B d e g - 2 A b^3 c f g - a b^2 B c f g + 4 a A b^2 d f g - a^2 b B d f g - 2 A b^3 c e h - a b^2 B c e h + 4 a A b^2 d e h - a^2 b B d e h + 4 a A b^2 c f h - a^2 b B c f h - 6 a^2 A b d f h + 3 a^3 B d f h\right)\right) \Big/$$

$$\left(3\,(b\,c-a\,d)^2\,(b\,e-a\,f)^2\,(b\,g-a\,h)^2\,(a+b\,x)\right)\Bigg) +$$

$$\frac{1}{3\,b^2\,(-b\,c+a\,d)^2\,(-b\,e+a\,f)^2\,(-b\,g+a\,h)^2}$$

$$2\Bigg(\Bigg(\left(3\,b^3\,B\,c\,e\,g-2\,A\,b^3\,d\,e\,g-a\,b^2\,B\,d\,e\,g-2\,A\,b^3\,c\,f\,g-a\,b^2\,B\,c\,f\,g+\right.$$

$$\left.4\,a\,A\,b^2\,d\,f\,g-a^2\,b\,B\,d\,f\,g-2\,A\,b^3\,c\,e\,h-a\,b^2\,B\,c\,e\,h+4\,a\,A\,b^2\,d\,e\,h-\right.$$
$$\left.a^2\,b\,B\,d\,e\,h+4\,a\,A\,b^2\,c\,f\,h-a^2\,b\,B\,c\,f\,h-6\,a^2\,A\,b\,d\,f\,h+3\,a^3\,B\,d\,f\,h\right)$$
$$(a+b\,x)^{5/2}\left(d+\frac{b\,c}{a+b\,x}-\frac{a\,d}{a+b\,x}\right)\left(f+\frac{b\,e}{a+b\,x}-\frac{a\,f}{a+b\,x}\right)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)\Bigg)\Bigg/$$
$$\left(\sqrt{c+\frac{(a+b\,x)\,\left(d-\frac{a\,d}{a+b\,x}\right)}{b}}\,\sqrt{e+\frac{(a+b\,x)\,\left(f-\frac{a\,f}{a+b\,x}\right)}{b}}\,\sqrt{g+\frac{(a+b\,x)\,\left(h-\frac{a\,h}{a+b\,x}\right)}{b}}\right)+$$

$$\frac{1}{\sqrt{c+\frac{(a+b\,x)\,\left(d-\frac{a\,d}{a+b\,x}\right)}{b}}\,\sqrt{e+\frac{(a+b\,x)\,\left(f-\frac{a\,f}{a+b\,x}\right)}{b}}\,\sqrt{g+\frac{(a+b\,x)\,\left(h-\frac{a\,h}{a+b\,x}\right)}{b}}}\,(b\,c-a\,d)\,(b\,e-a\,f)$$

$$(b\,g-a\,h)\,(a+b\,x)^{3/2}\sqrt{\left(\left(d+\frac{b\,c}{a+b\,x}-\frac{a\,d}{a+b\,x}\right)\left(f+\frac{b\,e}{a+b\,x}-\frac{a\,f}{a+b\,x}\right)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)\right)}$$

$$\Bigg(-\Bigg(\Bigg(3\,b^3\,B\,c\,e\,g\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\Bigg(-\Bigg(\Bigg(\Bigg((b\,d\,g-b\,c\,h)\,\text{EllipticE}\Big[$$

$$\text{ArcSin}\Big[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\Big],\ \frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Bigg)\Bigg/$$

$$\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\Bigg)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\Big],\ \frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2Ab^3deg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(ab^2Bdeg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2Ab^3cfg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Big[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(ab^2Bcfg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Big[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\Bigg)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(4\,a\,A\,b^2\,d\,f\,g\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\,\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Bigg)\Bigg/$$

$$\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\Bigg)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(a^2\,b\,B\,d\,f\,g\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\,\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Bigg]\Bigg/$$

$$\left((b c-a d)(b g-a h)\right)\Bigg) - \frac{1}{-b c+a d} d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2 A b^3 c e h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Bigg]\Bigg/$$

$$\left((b c-a d)(b g-a h)\right)\Bigg) - \frac{1}{-b c+a d} d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(a b^2 B c e h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Bigg/\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-\left(4aAb^2deh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Bigg/\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(a^2\,b\,B\,d\,e\,h\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left.\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(4\,a\,A\,b^2\,c\,f\,h\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left.\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(a^2 b B c f h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(6 a^2 A b d f h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Bigg],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(3a^3Bdfh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Bigg[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Bigg],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg)\Bigg/$$

$$\left.\left.\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\right.\right.\right.$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Bigg],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(Ab^2dfg\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\text{EllipticF}\Big[\text{ArcSin}\Bigg[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Bigg],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(a\,b\,B\,d\,f\,g\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$
$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right/$$
$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$
$$\left(A\,b^2\,d\,e\,h\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$
$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right/$$
$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$
$$\left(a\,b\,B\,d\,e\,h\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$
$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right/$$
$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$
$$\left(A\,b^2\,c\,f\,h\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$
$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}-\right.$$

$$\left(abBcfh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}-\right.$$

$$\left(3aAbdfh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}+\right.$$

$$\left(3a^2Bdfh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left.\left.\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)\right)\right)$$

Problem 11: Result more than twice size of optimal antiderivative.

$$\int \frac{(a+b\,x)^{3/2}\,(d\,e+c\,f+2\,d\,f\,x)}{\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 898 leaves, 10 steps):

$$\frac{(5\,a\,d\,f\,h-b\,(3\,d\,f\,g+d\,e\,h+c\,f\,h))\,\sqrt{a+b\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{2\,f\,h^2\,\sqrt{c+d\,x}}+$$

$$\frac{b\,\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{h}-$$

$$\left(\sqrt{d\,g-c\,h}\,\sqrt{f\,g-e\,h}\,(5\,a\,d\,f\,h-b\,(3\,d\,f\,g+d\,e\,h+c\,f\,h))\,\sqrt{a+b\,x}\,\sqrt{-\frac{(d\,e-c\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d\,g-c\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}}\right],\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(b\,e-a\,f)\,(d\,g-c\,h)}\right]\right)\Big/$$

$$\left(2\,d\,f\,h^2\sqrt{\frac{(d\,e-c\,f)\,(a+b\,x)}{(b\,e-a\,f)\,(c+d\,x)}}\,\sqrt{g+h\,x}\right)-$$

$$\left((b\,e-a\,f)\,\sqrt{b\,g-a\,h}\,(3\,a\,d\,f\,h+b\,(c\,f\,h-d\,(3\,f\,g+e\,h)))\sqrt{\frac{(b\,e-a\,f)\,(c+d\,x)}{(d\,e-c\,f)\,(a+b\,x)}}\right.$$

$$\left.\sqrt{g+h\,x}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],-\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(d\,e-c\,f)\,(b\,g-a\,h)}\right]\right)\Big/$$

$$\left(2\,b\,f\,h^2\,\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{(b\,e-a\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(a+b\,x)}}\right)-$$

$$\left(\sqrt{-d\,g+c\,h}\,(6\,a\,b\,d^2\,f^2\,g\,h-3\,a^2\,d^2\,f^2\,h^2+b^2\,(2\,c\,d\,e\,f\,h^2-c^2\,f^2\,h^2-d^2\,(3\,f^2\,g^2+e^2\,h^2)))\right.$$

$$(a+b\,x)\sqrt{\frac{(b\,g-a\,h)\,(c+d\,x)}{(d\,g-c\,h)\,(a+b\,x)}}\sqrt{\frac{(b\,g-a\,h)\,(e+f\,x)}{(f\,g-e\,h)\,(a+b\,x)}}$$

$$\left.\text{EllipticPi}\left[-\frac{b\,(d\,g-c\,h)}{(b\,c-a\,d)\,h},\text{ArcSin}\left[\frac{\sqrt{b\,c-a\,d}\,\sqrt{g+h\,x}}{\sqrt{-d\,g+c\,h}\,\sqrt{a+b\,x}}\right],\frac{(b\,e-a\,f)\,(d\,g-c\,h)}{(b\,c-a\,d)\,(f\,g-e\,h)}\right]\right)\Big/$$

$$\left(2\,b\,d\,\sqrt{b\,c-a\,d}\,f\,h^3\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\right)$$

Result (type 4, 14 853 leaves):

$$\frac{b\,\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{h}+$$

$$\frac{1}{b^2 h}\left(\left(\left(-3bdfg-bdeh-bcfh+5adfh\right)\left(a+bx\right)^{5/2}\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)\Big/\left(2dfh\sqrt{c+\frac{\left(a+bx\right)\left(d-\frac{ad}{a+bx}\right)}{b}}\sqrt{e+\frac{\left(a+bx\right)\left(f-\frac{af}{a+bx}\right)}{b}}\sqrt{g+\frac{\left(a+bx\right)\left(h-\frac{ah}{a+bx}\right)}{b}}\right)+\left(1\Big/\left(2dfh\sqrt{c+\frac{\left(a+bx\right)\left(d-\frac{ad}{a+bx}\right)}{b}}\sqrt{e+\frac{\left(a+bx\right)\left(f-\frac{af}{a+bx}\right)}{b}}\sqrt{g+\frac{\left(a+bx\right)\left(h-\frac{ah}{a+bx}\right)}{b}}\right)\right)\left(a+bx\right)^{3/2}\sqrt{\left(\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)}\left(\left(\left(3b^4cdef\right.\right.\right.\right.$$

$$\left.\left.\left.\left.g^2\sqrt{\frac{\left(bc-ad\right)\left(bg-ah\right)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left(bdg-bch\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(be-af\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b\left(-fg+eh\right)}}\right],\frac{\left(-bc+ad\right)\left(-fg+eh\right)}{\left(-be+af\right)\left(-dg+ch\right)}\right]\right)\Big/\left(\left(bc-ad\right)\left(bg-ah\right)\right)\right)-\frac{1}{-bc+ad}\right.\right.\right.\right.$$

$$\left.\left.\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(be-af\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b\left(-fg+eh\right)}}\right],\frac{\left(-bc+ad\right)\left(-fg+eh\right)}{\left(-be+af\right)\left(-dg+ch\right)}\right]\right)\right)\Big/\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-\left(\left(3ab^3d^2ef\right.\right.\right.$$

$$\left.\left.\left.g^2\sqrt{\frac{\left(bc-ad\right)\left(bg-ah\right)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\right.\right.\right.$$

$$\left(-\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(3\,a\,b^3\,c\,d\,f^2\,g^2\,\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left.\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\,\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\right.$$

$$\left(-\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(3\,a^2\,b^2\,d^2\,f^2\,g^2\,\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right) \sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}$$

$$\left(-\left(\left(\left(b d g-b c h\right) \text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right) \Big/ \left(\left(b c-a d\right)\left(b g-a h\right)\right)\right)-\frac{1}{-b c+a d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right], \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg) \Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}} \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(b^4 c d e^2 g h \sqrt{\frac{\left(b c-a d\right)\left(b g-a h\right)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\right.$$

$$\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right) \sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}$$

$$\left(-\left(\left(\left(b d g-b c h\right) \text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right) \Big/ \left(\left(b c-a d\right)\left(b g-a h\right)\right)\right)-\frac{1}{-b c+a d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right], \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg) \Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}} \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(a\,b^3\,d^2\,e^2\,g\,h\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}$$

$$\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(b^4\,c^2\,e\,f\,g\,h\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}$$

$$\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(10ab^3cdefgh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}$$

$$\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(9a^2b^2d^2efgh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(a b^3 c^2 f^2 g h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\right.$$

$$\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}$$

$$\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(9 a^2 b^2 c d f^2 g h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\right.$$

$$\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}$$

$$\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\right.\right.\right.\right.$$

$$\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}]\Bigg)\Big/\Big((b\,c-a\,d)\,(b\,g-a\,h)\Big)\Bigg)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\Big],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Bigg)\Bigg)\Big/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\Bigg)-$$

$$\Bigg(8\,a^3\,b\,d^2\,f^2\,g\,h\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}$$

$$\Bigg(-\Bigg(\Bigg((b\,d\,g-b\,c\,h)\,\text{EllipticE}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\Big],$$

$$\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}]\Bigg)\Big/\Big((b\,c-a\,d)\,(b\,g-a\,h)\Big)\Bigg)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\Big],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Bigg)\Bigg)\Big/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\Bigg)-$$

$$\Bigg(a\,b^3\,c\,d\,e^2\,h^2\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}$$

$$\left(-\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\,\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(a^2\,b^2\,d^2\,e^2\,h^2\,\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left.\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\,\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\right.$$

$$\left(-\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\,\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(a\,b^3\,c^2\,e\,f\,h^2\,\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right) \sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}$$

$$\left(-\left(\left(\left(b d g-b c h\right) \text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right) \Big/ \left(\left(b c-a d\right)\left(b g-a h\right)\right)\right)-\frac{1}{-b c+a d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right], \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg) \Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}} \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(7 a^2 b^2 c d e f h^2 \sqrt{\frac{\left(b c-a d\right)\left(b g-a h\right)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\right.$$

$$\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right) \sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}$$

$$\left(-\left(\left(\left(b d g-b c h\right) \text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right) \Big/ \left(\left(b c-a d\right)\left(b g-a h\right)\right)\right)-\frac{1}{-b c+a d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right], \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg) \Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}} \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(6\,a^3\,b\,d^2\,e\,f\,h^2\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}\right.\right.\right.\right.$$

$$\left.\left.\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(a^2\,b^2\,c^2\,f^2\,h^2\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}\right.\right.\right.\right.$$

$$\left.\left.\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(6a^3bcdf^2h^2\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}$$

$$\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(5a^4d^2f^2h^2\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2b^3cdefgh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(2ab^2d^2efgh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(2ab^2cdf^2gh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2\,a^2\,b\,d^2\,f^2\,g\,h\,\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(2\,a\,b^2\,c\,d\,e\,f\,h^2\,\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(2\,a^2\,b\,d^2\,e\,f\,h^2\,\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(2\,a^2\,b\,c\,d\,f^2\,h^2\,\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(2a^3d^2f^2h^2\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(6abd^2f^2g(-bg+ah)\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)}{\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)^2}}\,\text{EllipticPi}\left[-\frac{-bfg+beh}{(-be+af)h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(3b^2d^2f^2g^2(-bg+ah)\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)}{\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)^2}}\,\text{EllipticPi}\left[-\frac{-bfg+beh}{(-be+af)h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(h\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(b^2\,d^2\,e^2\,h\left(-b\,g+a\,h\right)\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)}{\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b\,f\,g+b\,e\,h}{\left(-b\,e+a\,f\right)h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(2\,b^2\,c\,d\,e\,f\,h\left(-b\,g+a\,h\right)\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)}{\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b\,f\,g+b\,e\,h}{\left(-b\,e+a\,f\right)h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(b^2\,c^2\,f^2\,h\left(-b\,g+a\,h\right)\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)}{\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b\,f\,g+b\,e\,h}{\left(-b\,e+a\,f\right)h},\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\,,\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg/$$

$$\left(\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(3a^2d^2f^2h(-bg+ah)\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)}{\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)^2}}\ \text{EllipticPi}\left[-\frac{-bfg+beh}{(-be+af)h},\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\,,\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg/$$

$$\left.\left.\left(\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)\right)\right)$$

Problem 12: Result more than twice size of optimal antiderivative.

$$\int\frac{\sqrt{a+bx}\ (de+cf+2dfx)}{\sqrt{c+dx}\ \sqrt{e+fx}\ \sqrt{g+hx}}\,dx$$

Optimal (type 4, 472 leaves, 5 steps) :

$$\frac{2\,b\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{h\,\sqrt{a+b\,x}} -$$

$$\left(2\,\sqrt{b\,g-a\,h}\,\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{(b\,e-a\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(a+b\,x)}}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],\right.\right.$$

$$\left.\left.-\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(d\,e-c\,f)\,(b\,g-a\,h)}\right]\right)\Big/\left(h\,\sqrt{\frac{(b\,e-a\,f)\,(c+d\,x)}{(d\,e-c\,f)\,(a+b\,x)}}\,\sqrt{g+h\,x}\right) -$$

$$\left(2\,d\,(b\,g-a\,h)^{3/2}\,\sqrt{\frac{(f\,g-e\,h)\,(a+b\,x)}{(b\,g-a\,h)\,(e+f\,x)}}\,\sqrt{\frac{(f\,g-e\,h)\,(c+d\,x)}{(d\,g-c\,h)\,(e+f\,x)}}\,(e+f\,x)\,\text{EllipticPi}\left[\frac{f\,(b\,g-a\,h)}{(b\,e-a\,f)\,h},\right.\right.$$

$$\left.\left.\text{ArcSin}\left[\frac{\sqrt{b\,e-a\,f}\,\sqrt{g+h\,x}}{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}\right],\frac{(d\,e-c\,f)\,(b\,g-a\,h)}{(b\,e-a\,f)\,(d\,g-c\,h)}\right]\right)\Big/\left(\sqrt{b\,e-a\,f}\,h^2\,\sqrt{a+b\,x}\,\sqrt{c+d\,x}\right)$$

Result (type 4, 6583 leaves) :

$$-\frac{1}{d}2\left(-\left(\left(\left(c+d\,x\right)^{3/2}\left(f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}\right)\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)\sqrt{a+\frac{(c+d\,x)\left(b-\frac{b\,c}{c+d\,x}\right)}{d}}\right)\Big/\right.\right.$$

$$\left.\left.\left(h\,\sqrt{e+\frac{(c+d\,x)\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\,\sqrt{g+\frac{(c+d\,x)\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}\right)\right)-\left(f\,(b\,g-a\,h)\,(d\,g-c\,h)^2\right.$$

$$\sqrt{c+d\,x}\,\sqrt{\left(\left(b-\frac{b\,c}{c+d\,x}+\frac{a\,d}{c+d\,x}\right)\left(f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}\right)\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)\right)}$$

$$\sqrt{a+\frac{(c+d\,x)\left(b-\frac{b\,c}{c+d\,x}\right)}{d}}\left(\left(\left(d\,e\,\sqrt{-\frac{(b\,c-a\,d)\,(-d\,g+c\,h)\left(-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}\right)}{-b\,d\,g+a\,d\,h}}\right.\right.\right.$$

$$\left.\left.\left.\left(-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}\right)\sqrt{\frac{-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}}{\frac{f}{-d\,e+c\,f}-\frac{h}{-d\,g+c\,h}}}\right)\right.$$

$$\left(\left(\left(-b\,d\,g+a\,d\,h\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(d\,e-c\,f)\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,(-f\,g+e\,h)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(b\,c-a\,d)\,(-f\,g+e\,h)}{(-d\,e+c\,f)\,(-b\,g+a\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(-d\,g+c\,h)\right)-\frac{1}{b\,c-a\,d}b\,\text{EllipticF}\left[\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\,\right],\ \frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\Bigg]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-$$

$$\left(cf\sqrt{-\frac{(bc-ad)(-dg+ch)\left(-\frac{b}{bc-ad}+\frac{1}{c+dx}\right)}{-bdg+adh}}\right.$$

$$\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}$$

$$\left(\left(\left(-bdg+adh\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\,\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/\left((bc-ad)(-dg+ch)\right)-\frac{1}{bc-ad}b\,\text{EllipticF}\Big[$$

$$\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\,\right],\ \frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\Bigg]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)+$$

$$\left(f\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\,\right],\ \frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\Bigg)\Bigg/$$

$$\left.\left.\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)\right)\right)\Bigg/$$

$$\left(h^2\left(-f g+e h\right)\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\sqrt{e+\frac{\left(c+d x\right)\left(f-\frac{c f}{c+d x}\right)}{d}}\sqrt{g+\frac{\left(c+d x\right)\left(h-\frac{c h}{c+d x}\right)}{d}}\right)+$$

$$\left(\left(b e-a f\right)\left(d e-c f\right)\left(d g-c h\right)\sqrt{c+d x}\sqrt{\left(\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\left(f+\frac{d e}{c+d x}-\frac{c f}{c+d x}\right)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)\right)}\sqrt{a+\frac{\left(c+d x\right)\left(b-\frac{b c}{c+d x}\right)}{d}}\left(\left(d g\sqrt{-\frac{\left(b c-a d\right)\left(-d g+c h\right)\left(-\frac{b}{b c-a d}+\frac{1}{c+d x}\right)}{-b d g+a d h}}\left(-\frac{f}{-d e+c f}+\frac{1}{c+d x}\right)\sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}\left(\left(\left(-b d g+a d h\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d e-c f\right)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d\left(-f g+e h\right)}}\right],\frac{\left(b c-a d\right)\left(-f g+e h\right)}{\left(-d e+c f\right)\left(-b g+a h\right)}\right]\right)\Big/\left(\left(b c-a d\right)\left(-d g+c h\right)\right)-\frac{1}{b c-a d}b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d e-c f\right)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d\left(-f g+e h\right)}}\right],\frac{\left(b c-a d\right)\left(-f g+e h\right)}{\left(-d e+c f\right)\left(-b g+a h\right)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-d e+c f}+\frac{1}{c+d x}}{-\frac{f}{-d e+c f}+\frac{h}{-d g+c h}}}\sqrt{\left(b+\frac{-b c+a d}{c+d x}\right)\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(c\,h\sqrt{-\frac{(b\,c-a\,d)\,(-d\,g+c\,h)\left(-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}\right)}{-b\,d\,g+a\,d\,h}}\left(-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}\right)\sqrt{\frac{-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}}{\frac{f}{-d\,e+c\,f}-\frac{h}{-d\,g+c\,h}}}\left(\left(\left(-b\,d\,g+a\,d\,h\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(d\,e-c\,f)\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,(-f\,g+e\,h)}}\right],\frac{(b\,c-a\,d)\,(-f\,g+e\,h)}{(-d\,e+c\,f)\,(-b\,g+a\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(-d\,g+c\,h)\right)-\frac{1}{b\,c-a\,d}b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(d\,e-c\,f)\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,(-f\,g+e\,h)}}\right],\frac{(b\,c-a\,d)\,(-f\,g+e\,h)}{(-d\,e+c\,f)\,(-b\,g+a\,h)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(h\sqrt{\frac{-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}}{-\frac{b}{b\,c-a\,d}+\frac{h}{-d\,g+c\,h}}}\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\left(-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}\right)\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-d\,e+c\,f)\left(-h-\frac{d\,g}{c+d\,x}+\frac{c\,h}{c+d\,x}\right)}{d\,(-f\,g+e\,h)}}\right],\frac{(b\,c-a\,d)\,(-f\,g+e\,h)}{(-d\,e+c\,f)\,(-b\,g+a\,h)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}}{\frac{f}{-d\,e+c\,f}-\frac{h}{-d\,g+c\,h}}}\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\right)\Big/\left(h\,(-f\,g+e\,h)\left(b-\frac{b\,c}{c+d\,x}+\frac{a\,d}{c+d\,x}\right)\sqrt{e+\frac{(c+d\,x)\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\sqrt{g+\frac{(c+d\,x)\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}\right)-$$

$$\frac{1}{h^2\left(b-\frac{bc}{c+dx}+\frac{ad}{c+dx}\right)\sqrt{e+\frac{(c+dx)\left(f-\frac{cf}{c+dx}\right)}{d}}\sqrt{g+\frac{(c+dx)\left(h-\frac{ch}{c+dx}\right)}{d}}}$$

$$\frac{d\left(bg-ah\right)}{\sqrt{c+dx}}\sqrt{\left(\left(b-\frac{bc}{c+dx}+\frac{ad}{c+dx}\right)\left(f+\frac{de}{c+dx}-\frac{cf}{c+dx}\right)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)\right)}\sqrt{a+\frac{(c+dx)\left(b-\frac{bc}{c+dx}\right)}{d}}$$

$$\left(\left(\left(d^2\,e\,g\sqrt{-\frac{(bc-ad)\left(-dg+ch\right)\left(-\frac{b}{bc-ad}+\frac{1}{c+dx}\right)}{-bdg+adh}}\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\left(\left(\left(-bdg+adh\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\right],\frac{(bc-ad)\left(-fg+eh\right)}{\left(-de+cf\right)\left(-bg+ah\right)}\right]\right)\Big/\left(\left(bc-ad\right)\left(-dg+ch\right)\right)-\frac{1}{bc-ad}b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\right],\frac{(bc-ad)\left(-fg+eh\right)}{\left(-de+cf\right)\left(-bg+ah\right)}\right]\right)\right)\Big/\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-\left(cdfg\sqrt{-\frac{(bc-ad)\left(-dg+ch\right)\left(-\frac{b}{bc-ad}+\frac{1}{c+dx}\right)}{-bdg+adh}}\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\right.$$

$$\left(\left(\left(-b\,d\,g+a\,d\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\right.\right.$$

$$\left.\left.\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\right)-\frac{1}{b\,c-a\,d}b\,\text{EllipticF}\left[\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\,\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\,\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(c\,d\,e\,h\,\sqrt{-\frac{\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\,\left(-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}\right)}{-b\,d\,g+a\,d\,h}}\right.$$

$$\left(-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}\right)\,\sqrt{\frac{-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}}{\frac{f}{-d\,e+c\,f}-\frac{h}{-d\,g+c\,h}}}$$

$$\left(\left(\left(-b\,d\,g+a\,d\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\right)-\frac{1}{b\,c-a\,d}b\,\text{EllipticF}\left[\right.$$

$$\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\,\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\,\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(c^2\,f\,h\,\sqrt{-\frac{\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\,\left(-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}\right)}{-b\,d\,g+a\,d\,h}}\right.$$

$$\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}$$

$$\left(\left(\left(-bdg+adh\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\,\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(bc-ad)\,(-fg+eh)}{(-de+cf)\,(-bg+ah)}\right]\right)\Big/\left((bc-ad)\,(-dg+ch)\right)-\frac{1}{bc-ad}b\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\,\right],\frac{(bc-ad)\,(-fg+eh)}{(-de+cf)\,(-bg+ah)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)+$$

$$\left(dfg\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\,\right],\frac{(bc-ad)\,(-fg+eh)}{(-de+cf)\,(-bg+ah)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)+$$

$$\left(deh\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\,\right],\frac{(bc-ad)\,(-fg+eh)}{(-de+cf)\,(-bg+ah)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-$$

$$\left(2\,c\,f\,h\,\sqrt{\frac{-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}}{-\frac{b}{b\,c-a\,d}+\frac{h}{-d\,g+c\,h}}}\,\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\,\left(-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-d\,e+c\,f)\left(-h-\frac{d\,g}{c+d\,x}+\frac{c\,h}{c+d\,x}\right)}{d\,(-f\,g+e\,h)}}\,\right],\,\frac{(b\,c-a\,d)\,(-f\,g+e\,h)}{(-d\,e+c\,f)\,(-b\,g+a\,h)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}}{\frac{f}{-d\,e+c\,f}-\frac{h}{-d\,g+c\,h}}}\,\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(f\,(-d\,g+c\,h)\left(-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}\right)\sqrt{\frac{-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}}{-\frac{b}{b\,c-a\,d}+\frac{h}{-d\,g+c\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}\right)\left(-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}\right)}{\left(-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}\right)^2}}\,\text{EllipticPi}\left[-\frac{-d\,f\,g+d\,e\,h}{(-d\,e+c\,f)\,h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{(-d\,e+c\,f)\left(-h-\frac{d\,g}{c+d\,x}+\frac{c\,h}{c+d\,x}\right)}{d\,(-f\,g+e\,h)}}\,\right],\,\frac{(b\,c-a\,d)\,(-f\,g+e\,h)}{(-d\,e+c\,f)\,(-b\,g+a\,h)}\right]\right)\Big/$$

$$\left.\left(\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\right)$$

Problem 13: Result more than twice size of optimal antiderivative.

$$\int\frac{d\,e+c\,f+2\,d\,f\,x}{\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 449 leaves, 5 steps):

$$\left(2\,(b\,d\,e+b\,c\,f-2\,a\,d\,f)\,\sqrt{\frac{(b\,e-a\,f)\,(c+d\,x)}{(d\,e-c\,f)\,(a+b\,x)}}\,\sqrt{g+h\,x}\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],-\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(d\,e-c\,f)\,(b\,g-a\,h)}\right]\right)\Big/$$

$$\left(b\,\sqrt{b\,g-a\,h}\,\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{(b\,e-a\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(a+b\,x)}}\right)+$$

$$\left(4\,d\,f\,\sqrt{-d\,g+c\,h}\,(a+b\,x)\,\sqrt{\frac{(b\,g-a\,h)\,(c+d\,x)}{(d\,g-c\,h)\,(a+b\,x)}}\,\sqrt{\frac{(b\,g-a\,h)\,(e+f\,x)}{(f\,g-e\,h)\,(a+b\,x)}}\right.$$

$$\left.\text{EllipticPi}\left[-\frac{b\,(d\,g-c\,h)}{(b\,c-a\,d)\,h},\text{ArcSin}\left[\frac{\sqrt{b\,c-a\,d}\,\sqrt{g+h\,x}}{\sqrt{-d\,g+c\,h}\,\sqrt{a+b\,x}}\right],\frac{(b\,e-a\,f)\,(d\,g-c\,h)}{(b\,c-a\,d)\,(f\,g-e\,h)}\right]\right)\Big/$$

$$\left(b\,\sqrt{b\,c-a\,d}\,h\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\right)$$

Result (type 4, 1529 leaves):

$$\frac{1}{b^2\sqrt{c+\frac{(a+b\,x)\left(d-\frac{a\,d}{a+b\,x}\right)}{b}}\sqrt{e+\frac{(a+b\,x)\left(f-\frac{a\,f}{a+b\,x}\right)}{b}}\sqrt{g+\frac{(a+b\,x)\left(h-\frac{a\,h}{a+b\,x}\right)}{b}}}$$

$$2\,(a+b\,x)^{3/2}\sqrt{\left(d+\frac{b\,c}{a+b\,x}-\frac{a\,d}{a+b\,x}\right)\left(f+\frac{b\,e}{a+b\,x}-\frac{a\,f}{a+b\,x}\right)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}$$

$$\left(-\left(\left(\left(b\,d\,e\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-b\,e+a\,f)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\right.\right.\right.$$

$$\left.\left.\left.\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)\right)\right)-$$

$$\left(b\,c\,f\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-b e+a f)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2 a d f\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-b e+a f)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2 d f(-b g+a h)\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)}{\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)^2}}\,\text{EllipticPi}\left[-\frac{-b f g+b e h}{(-b e+a f) h},\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(-b e+a f)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Bigg]\Bigg/$$

$$\left.\left.\left(h\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)\right)$$

Problem 14: Result more than twice size of optimal antiderivative.

$$\int\frac{d e+c f+2 d f x}{(a+b x)^{3/2}\sqrt{c+d x}\sqrt{e+f x}\sqrt{g+h x}}\,dx$$

Optimal (type 4, 625 leaves, 7 steps):

$$\frac{2\,d\,(b\,d\,e+b\,c\,f-2\,a\,d\,f)\,\sqrt{a+b\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{(b\,c-a\,d)\,(b\,e-a\,f)\,(b\,g-a\,h)\,\sqrt{c+d\,x}}-$$

$$\frac{2\,b\,(b\,d\,e+b\,c\,f-2\,a\,d\,f)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{(b\,c-a\,d)\,(b\,e-a\,f)\,(b\,g-a\,h)\,\sqrt{a+b\,x}}-$$

$$\left(2\,(b\,d\,e+b\,c\,f-2\,a\,d\,f)\,\sqrt{d\,g-c\,h}\,\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}\,\sqrt{-\frac{(d\,e-c\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d\,g-c\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}}\right],\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(b\,e-a\,f)\,(d\,g-c\,h)}\right]\right)\Big/$$

$$\left((b\,c-a\,d)\,(b\,e-a\,f)\,(b\,g-a\,h)\,\sqrt{\frac{(d\,e-c\,f)\,(a+b\,x)}{(b\,e-a\,f)\,(c+d\,x)}}\,\sqrt{g+h\,x}\right)-$$

$$\left(2\,d\,(d\,e-c\,f)\,\sqrt{\frac{(b\,e-a\,f)\,(c+d\,x)}{(d\,e-c\,f)\,(a+b\,x)}}\,\sqrt{g+h\,x}\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],-\frac{(b\,c-a\,d)\,(f\,g-e\,h)}{(d\,e-c\,f)\,(b\,g-a\,h)}\right]\right)\Big/$$

$$\left((b\,c-a\,d)\,\sqrt{b\,g-a\,h}\,\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{(b\,e-a\,f)\,(g+h\,x)}{(f\,g-e\,h)\,(a+b\,x)}}\right)$$

Result (type 4, 2236 leaves):

$$-\frac{2\,b\,(b\,d\,e+b\,c\,f-2\,a\,d\,f)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{(b\,c-a\,d)\,(b\,e-a\,f)\,(b\,g-a\,h)\,\sqrt{a+b\,x}}+$$

$$\frac{1}{b^2\,(-b\,c+a\,d)\,(-b\,e+a\,f)\,(-b\,g+a\,h)}2\left(\left((-b\,d\,e-b\,c\,f+2\,a\,d\,f)\,(a+b\,x)^{5/2}\right.\right.$$

$$\left.\left.\left(d+\frac{b\,c}{a+b\,x}-\frac{a\,d}{a+b\,x}\right)\left(f+\frac{b\,e}{a+b\,x}-\frac{a\,f}{a+b\,x}\right)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)\right)\Big/\right.$$

$$\left.\left(\sqrt{c+\frac{(a+b\,x)\left(d-\frac{a\,d}{a+b\,x}\right)}{b}}\,\sqrt{e+\frac{(a+b\,x)\left(f-\frac{a\,f}{a+b\,x}\right)}{b}}\,\sqrt{g+\frac{(a+b\,x)\left(h-\frac{a\,h}{a+b\,x}\right)}{b}}\right)-\right.$$

$$\frac{1}{\sqrt{c+\frac{(a+b\,x)\left(d-\frac{a\,d}{a+b\,x}\right)}{b}}\,\sqrt{e+\frac{(a+b\,x)\left(f-\frac{a\,f}{a+b\,x}\right)}{b}}\,\sqrt{g+\frac{(a+b\,x)\left(h-\frac{a\,h}{a+b\,x}\right)}{b}}}(b\,c-a\,d)\,(b\,e-a\,f)$$

$$(b g - a h)\,(a + b x)^{3/2}\sqrt{\left(\left(d + \frac{b c}{a + b x} - \frac{a d}{a + b x}\right)\left(f + \frac{b e}{a + b x} - \frac{a f}{a + b x}\right)\left(h + \frac{b g}{a + b x} - \frac{a h}{a + b x}\right)\right)}$$

$$\left(-\left(\left(\left(b d e\sqrt{\frac{(b c - a d)\,(b g - a h)\left(-\frac{d}{-b c + a d} + \frac{1}{a + b x}\right)}{b d g - b c h}}\left(-\frac{f}{-b e + a f} + \frac{1}{a + b x}\right)\right.\right.\right.\right.$$

$$\sqrt{\frac{-\frac{h}{-b g + a h} + \frac{1}{a + b x}}{\frac{f}{-b e + a f} - \frac{h}{-b g + a h}}}\left(-\left(\left(\left((b d g - b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(b e - a f)\left(h + \frac{b g}{a + b x} - \frac{a h}{a + b x}\right)}{b\,(-f g + e h)}}\,\right], \frac{(-b c + a d)\,(-f g + e h)}{(-b e + a f)\,(-d g + c h)}\left.\right]\Big/$$

$$\left.\left.\left.\left.\left.\left((b c - a d)\,(b g - a h)\right)\right) - \frac{1}{-b c + a d} d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\sqrt{\frac{(b e - a f)\left(h + \frac{b g}{a + b x} - \frac{a h}{a + b x}\right)}{b\,(-f g + e h)}}\,\right], \frac{(-b c + a d)\,(-f g + e h)}{(-b e + a f)\,(-d g + c h)}\right]\right)\Big/$$

$$\left.\left.\left(\sqrt{\frac{-\frac{f}{-b e + a f} + \frac{1}{a + b x}}{-\frac{f}{-b e + a f} + \frac{h}{-b g + a h}}}\sqrt{\left(d + \frac{b c - a d}{a + b x}\right)\left(f + \frac{b e - a f}{a + b x}\right)\left(h + \frac{b g - a h}{a + b x}\right)}\right)\right) -$$

$$\left(b c f\sqrt{\frac{(b c - a d)\,(b g - a h)\left(-\frac{d}{-b c + a d} + \frac{1}{a + b x}\right)}{b d g - b c h}}\left(-\frac{f}{-b e + a f} + \frac{1}{a + b x}\right)\sqrt{\frac{-\frac{h}{-b g + a h} + \frac{1}{a + b x}}{\frac{f}{-b e + a f} - \frac{h}{-b g + a h}}}\right.$$

$$\left(-\left(\left(\left((b d g - b c h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b e - a f)\left(h + \frac{b g}{a + b x} - \frac{a h}{a + b x}\right)}{b\,(-f g + e h)}}\,\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b c + a d)\,(-f g + e h)}{(-b e + a f)\,(-d g + c h)}\right]\right)\Big/\left((b c - a d)\,(b g - a h)\right)\right) -$$

$$\left.\frac{1}{-b c + a d} d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b e - a f)\left(h + \frac{b g}{a + b x} - \frac{a h}{a + b x}\right)}{b\,(-f g + e h)}}\,\right],\right.$$

$$\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(2\,a\,d\,f\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Bigg]\Bigg)\Bigg/$$

$$\left.\left.\left.\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(2\,d\,f\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-b\,e+a\,f)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\Bigg/$$

$$\left.\left.\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)\right)\Bigg)$$

Problem 15: Result more than twice size of optimal antiderivative.

$$\int \frac{d e + c f + 2 d f x}{(a+b x)^{5/2} \sqrt{c+d x}\, \sqrt{e+f x}\, \sqrt{g+h x}}\, dx$$

Optimal (type 4, 1090 leaves, 8 steps):

$$\left(4 d \left(3 a^3 d^2 f^2 h - a^2 b d f \left(d f g + 4 d e h + 4 c f h\right) - b^3 \left(d^2 e^2 g - c d e \left(f g - e h\right) + c^2 f \left(f g + e h\right)\right) + a b^2 \left(2 c^2 f^2 h + d^2 e \left(f g + 2 e h\right) + c d f \left(f g + 3 e h\right)\right)\right) \sqrt{a+b x}\, \sqrt{e+f x}\, \sqrt{g+h x}\right) \Big/ \left(3 \left(b c - a d\right)^2 \left(b e - a f\right)^2 \left(b g - a h\right)^2 \sqrt{c+d x}\right) - \frac{2 b \left(b d e + b c f - 2 a d f\right) \sqrt{c+d x}\, \sqrt{e+f x}\, \sqrt{g+h x}}{3 \left(b c - a d\right) \left(b e - a f\right) \left(b g - a h\right) (a+b x)^{3/2}} -$$

$$\left(4 b \left(3 a^3 d^2 f^2 h - a^2 b d f \left(d f g + 4 d e h + 4 c f h\right) - b^3 \left(d^2 e^2 g - c d e \left(f g - e h\right) + c^2 f \left(f g + e h\right)\right) + a b^2 \left(2 c^2 f^2 h + d^2 e \left(f g + 2 e h\right) + c d f \left(f g + 3 e h\right)\right)\right) \sqrt{c+d x}\, \sqrt{e+f x}\, \sqrt{g+h x}\right) \Big/ \left(3 \left(b c - a d\right)^2 \left(b e - a f\right)^2 \left(b g - a h\right)^2 \sqrt{a+b x}\right) - \left(4 \sqrt{d g - c h}\, \sqrt{f g - e h} \left(3 a^3 d^2 f^2 h - a^2 b d f \left(d f g + 4 d e h + 4 c f h\right) - b^3 \left(d^2 e^2 g - c d e \left(f g - e h\right) + c^2 f \left(f g + e h\right)\right) + a b^2 \left(2 c^2 f^2 h + d^2 e \left(f g + 2 e h\right) + c d f \left(f g + 3 e h\right)\right)\right) \sqrt{a+b x}\, \sqrt{-\frac{(d e - c f)(g + h x)}{(f g - e h)(c + d x)}}\, \text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d g - c h}\, \sqrt{e+f x}}{\sqrt{f g - e h}\, \sqrt{c+d x}}\right], \frac{(b c - a d)(f g - e h)}{(b e - a f)(d g - c h)}\right]\right) \Big/ \left(3 \left(b c - a d\right)^2 \left(b e - a f\right)^2 \left(b g - a h\right)^2 \sqrt{\frac{(d e - c f)(a + b x)}{(b e - a f)(c + d x)}}\, \sqrt{g+h x}\right) +$$

$$\left(2 \left(d e - c f\right) \left(3 a^2 d^2 f h - a b d \left(d f g + 3 d e h + 2 c f h\right) + b^2 \left(2 d^2 e g - c d f g + c d e h + c^2 f h\right)\right) \sqrt{\frac{(b e - a f)(c + d x)}{(d e - c f)(a + b x)}}\, \sqrt{g+h x}\, \text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b g - a h}\, \sqrt{e+f x}}{\sqrt{f g - e h}\, \sqrt{a+b x}}\right], -\frac{(b c - a d)(f g - e h)}{(d e - c f)(b g - a h)}\right]\right) \Big/ \left(3 \left(b c - a d\right)^2 \left(b e - a f\right) \left(b g - a h\right)^{3/2} \sqrt{f g - e h}\, \sqrt{c+d x}\, \sqrt{-\frac{(b e - a f)(g + h x)}{(f g - e h)(a + b x)}}\right)$$

Result (type 4, 10601 leaves):

$$\sqrt{a+b x}\, \sqrt{c+d x}\, \sqrt{e+f x}\, \sqrt{g+h x} \left(-\frac{2 b \left(b d e + b c f - 2 a d f\right)}{3 \left(b c - a d\right) \left(b e - a f\right) \left(b g - a h\right) (a+b x)^2} + \left(4 b \left(b^3 d^2 e^2 g - b^3 c d e f g - a b^2 d^2 e f g +\right.\right.\right.$$

$$b^3 c^2 f^2 g - a b^2 c d f^2 g + a^2 b d^2 f^2 g + b^3 c d e^2 h - 2 a b^2 d^2 e^2 h + b^3 c^2 e f h - 3 a b^2 c d e f h + 4 a^2 b d^2 e f h - 2 a b^2 c^2 f^2 h + 4 a^2 b c d f^2 h - 3 a^3 d^2 f^2 h\Big)\Big) \Big/ \Big(3 (b c - a d)^2 (b e - a f)^2 (b g - a h)^2 (a + b x)\Big)\Big) +$$

$$\frac{1}{3 b^2 (-b c + a d)^2 (-b e + a f)^2 (-b g + a h)^2} \, 2 \Bigg(-\Bigg(\Bigg(2 \big(b^3 d^2 e^2 g - b^3 c d e f g - a b^2 d^2 e f g + b^3 c^2 f^2 g - a b^2 c d f^2 g + a^2 b d^2 f^2 g + b^3 c d e^2 h - 2 a b^2 d^2 e^2 h + b^3 c^2 e f h - 3 a b^2 c d e f h + 4 a^2 b d^2 e f h - 2 a b^2 c^2 f^2 h + 4 a^2 b c d f^2 h - 3 a^3 d^2 f^2 h\big) (a + b x)^{5/2} \left(d + \frac{b c}{a + b x} - \frac{a d}{a + b x}\right) \left(f + \frac{b e}{a + b x} - \frac{a f}{a + b x}\right) \left(h + \frac{b g}{a + b x} - \frac{a h}{a + b x}\right)\Bigg) \Bigg/ \left(\sqrt{c + \frac{(a + b x)\left(d - \frac{a d}{a+b x}\right)}{b}} \sqrt{e + \frac{(a + b x)\left(f - \frac{a f}{a+b x}\right)}{b}} \sqrt{g + \frac{(a + b x)\left(h - \frac{a h}{a+b x}\right)}{b}}\right)\Bigg) +$$

$$\frac{1}{\sqrt{c + \frac{(a+b x)\left(d - \frac{a d}{a+b x}\right)}{b}} \sqrt{e + \frac{(a+b x)\left(f - \frac{a f}{a+b x}\right)}{b}} \sqrt{g + \frac{(a+b x)\left(h - \frac{a h}{a+b x}\right)}{b}}} (b c - a d) (b e - a f) (b g - a h) (a + b x)^{3/2} \sqrt{\left(\left(d + \frac{b c}{a + b x} - \frac{a d}{a + b x}\right) \left(f + \frac{b e}{a + b x} - \frac{a f}{a + b x}\right) \left(h + \frac{b g}{a + b x} - \frac{a h}{a + b x}\right)\right)}$$

$$\Bigg(\Bigg(2 b^3 d^2 e^2 g \sqrt{\frac{(b c - a d)(b g - a h)\left(-\frac{d}{-b c+a d} + \frac{1}{a+b x}\right)}{b d g - b c h}} \left(-\frac{f}{-b e + a f} + \frac{1}{a + b x}\right) \sqrt{\frac{-\frac{h}{-b g+a h} + \frac{1}{a+b x}}{\frac{f}{-b e+a f} - \frac{h}{-b g+a h}}} \Bigg(-\Bigg(\Bigg((b d g - b c h) \text{EllipticE}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b e - a f)\left(h + \frac{b g}{a+b x} - \frac{a h}{a+b x}\right)}{b (-f g + e h)}}\Big], \frac{(-b c + a d)(-f g + e h)}{(-b e + a f)(-d g + c h)}\Big]\Bigg) \Big/$$

$$\big((b c - a d)(b g - a h)\big)\Bigg) - \frac{1}{-b c + a d} d \, \text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\Bigg(2b^3cdefg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\Bigg(-\Bigg(\Bigg((bdg-bch)\,\text{EllipticE}\Big[$$

$$\text{ArcSin}\Big[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$((bc-ad)(bg-ah))\Bigg)-\frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\Bigg(2ab^2d^2efg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\Bigg(-\Bigg(\Bigg((bdg-bch)\,\text{EllipticE}\Big[$$

$$\text{ArcSin}\Big[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\Bigg)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(2\,b^3\,c^2\,f^2\,g\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\,\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Bigg/$$

$$\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\Bigg)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(2\,a\,b^2\,c\,d\,f^2\,g\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\,\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg/$$

$$\left((bc-ad)(bg-ah)\right)\Bigg) - \frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Big)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\Bigg(2a^2bd^2f^2g\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\Bigg(-\Bigg(\Bigg(\Big((bdg-bch)\,\text{EllipticE}\Big[$$

$$\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg/$$

$$\left((bc-ad)(bg-ah)\right)\Bigg) - \frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Big)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\Bigg(2b^3cde^2h\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left(b d g-b c h\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right)\Big/\left(\left(b c-a d\right)\left(b g-a h\right)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-\left(4 a b^2 d^2 e^2 h\sqrt{\frac{\left(b c-a d\right)\left(b g-a h\right)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left(b d g-b c h\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right)\Big/\left(\left(b c-a d\right)\left(b g-a h\right)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b e-a f\right)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2\,b^3\,c^2\,e\,f\,h\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\,\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\,\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\left.\right]\Big/$$

$$\left.\left.\left.\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}\,d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(6\,a\,b^2\,c\,d\,e\,f\,h\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\,\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\,\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\left.\right]\Big/$$

$$\left.\left.\left.\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}\,d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(8 a^2 b d^2 e f h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(4 a b^2 c^2 f^2 h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\Big],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(8 a^2 b c d f^2 h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\Big],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left.\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\right.$$

$$\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\Big],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(6 a^3 d^2 f^2 h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\Big],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left((b c-a d)\ (b g-a h)\right)\Bigg)\Bigg(-\frac{1}{-b c+a d}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\ \left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\Big],\frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\Bigg)+$$

$$\Bigg(b^2 d^2 e f g\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-b e+a f)\ \left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\Big],\frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\Bigg)+$$

$$\Bigg(b^2 c d f^2 g\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-b e+a f)\ \left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\Big],\frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\Bigg)-$$

$$\Bigg(2 a b d^2 f^2 g\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-b e+a f)\ \left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\Big],\frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(b^2d^2e^2h\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2b^2cdefh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(5abd^2efh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(b^2c^2f^2h\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right)$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-b e+a f)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(5 a b c d f^2 h\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-b e+a f)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(6 a^2 d^2 f^2 h\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-b e+a f)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg/$$

$$\left.\left.\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)\right)\right)$$

Problem 16: Result unnecessarily involves complex numbers and more than twice size of optimal antiderivative.

$$\int\frac{(a+b x)\left(a b B-a^2 C+b^2 B x+b^2 C x^2\right)}{\sqrt{c+d x}\sqrt{e+f x}\sqrt{g+h x}}\,dx$$

Optimal (type 4, 721 leaves, 8 steps) :

$$\frac{1}{15\,d^2\,f^2\,h^2}2\,b^2\,\left(5\,b\,B\,d\,f\,h+2\,C\,\left(a\,d\,f\,h-2\,b\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}+\frac{2\,b^2\,C\,\left(a+b\,x\right)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{5\,d\,f\,h}-$$

$$\left(2\,b\,\sqrt{-d\,e+c\,f}\,\left(15\,a^2\,C\,d^2\,f^2\,h^2-10\,a\,b\,d\,f\,h\,\left(3\,B\,d\,f\,h-C\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)+b^2\,\left(10\,B\,d\,f\,h\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)-C\,\left(8\,c^2\,f^2\,h^2+7\,c\,d\,f\,h\,\left(f\,g+e\,h\right)+d^2\,\left(8\,f^2\,g^2+7\,e\,f\,g\,h+8\,e^2\,h^2\right)\right)\right)\right)\,\sqrt{\frac{d\,\left(e+f\,x\right)}{d\,e-c\,f}}\,\sqrt{g+h\,x}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{\left(d\,e-c\,f\right)\,h}{f\,\left(d\,g-c\,h\right)}\right]\right)\Big/$$

$$\left(15\,d^3\,f^{5/2}\,h^3\,\sqrt{e+f\,x}\,\sqrt{\frac{d\,\left(g+h\,x\right)}{d\,g-c\,h}}\right)-\frac{1}{15\,d^3\,f^{5/2}\,h^3\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}$$

$$2\,\sqrt{-d\,e+c\,f}\,\left(15\,a^3\,C\,d^2\,f^2\,h^3-15\,a^2\,b\,d^2\,f^2\,h^2\,\left(C\,g+B\,h\right)+5\,a\,b^2\,d\,f\,h\,\left(6\,B\,d\,f\,g\,h-C\,\left(c\,h\,\left(f\,g-e\,h\right)+d\,g\,\left(2\,f\,g+e\,h\right)\right)\right)-b^3\,\left(5\,B\,d\,f\,h\,\left(c\,h\,\left(f\,g-e\,h\right)+d\,g\,\left(2\,f\,g+e\,h\right)\right)-C\,\left(4\,c^2\,f\,h^2\,\left(f\,g-e\,h\right)+c\,d\,h\,\left(3\,f^2\,g^2+e\,f\,g\,h-4\,e^2\,h^2\right)+d^2\,g\,\left(8\,f^2\,g^2+3\,e\,f\,g\,h+4\,e^2\,h^2\right)\right)\right)\,\sqrt{\frac{d\,\left(e+f\,x\right)}{d\,e-c\,f}}\,\sqrt{\frac{d\,\left(g+h\,x\right)}{d\,g-c\,h}}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{\left(d\,e-c\,f\right)\,h}{f\,\left(d\,g-c\,h\right)}\right]$$

Result (type 4, 12665 leaves):

$$\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\left(\frac{2\,b^2\,\left(-4\,b\,C\,d\,f\,g-4\,b\,C\,d\,e\,h-4\,b\,c\,C\,f\,h+5\,b\,B\,d\,f\,h+5\,a\,C\,d\,f\,h\right)}{15\,d^2\,f^2\,h^2}+\frac{2\,b^3\,C\,x}{5\,d\,f\,h}\right)\,\sqrt{g+h\,x}+$$

$$\frac{1}{15\,d^4\,f^2\,h^2}2\left(-\frac{1}{f\,h\,\sqrt{e+\frac{(c+d\,x)\,\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\,\sqrt{g+\frac{(c+d\,x)\,\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}}b\,\left(-8\,b^2\,C\,d^2\,f^2\,g^2-7\,b^2\,C\,d^2\,e\,f\,g\,h-7\,b^2\,c\,C\,d\,f^2\,g\,h+10\,b^2\,B\,d^2\,f^2\,g\,h+10\,a\,b\,C\,d^2\,f^2\,g\,h-8\,b^2\,C\,d^2\,e^2\,h^2-7\,b^2\,c\,C\,d\,e\,f\,h^2+10\,b^2\,B\,d^2\,e\,f\,h^2+10\,a\,b\,C\,d^2\,e\,f\,h^2-8\,b^2\,c^2\,C\,f^2\,h^2+10\,b^2\,B\,c\,d\,f^2\,h^2+10\,a\,b\,c\,C\,d\,f^2\,h^2-30\,a\,b\,B\,d^2\,f^2\,h^2+15\,a^2\,C\,d^2\,f^2\,h^2\right)\,(c+d\,x)^{3/2}\,\left(f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)-\frac{1}{f\,h\,\sqrt{e+\frac{(c+d\,x)\,\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\,\sqrt{g+\frac{(c+d\,x)\,\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}}\,(c+d\,x)$$

$$\sqrt{\left(f+\frac{d e}{c+d x}-\frac{c f}{c+d x}\right)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}\left(\left(8 i b^3 C d^4 e f^2 g^3 h \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\right.\right.$$

$$\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(8 i b^3 c C d^3\right.$$

$$f^3 g^3 h\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.$$

$$\left.\left.\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+\left(7 i b^3 C d^4\right.$$

$$e^2 f g^2 h^2\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.$$

$$\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] - \text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\Bigg(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\Bigg) -$$

$$\Bigg(8\,i\,b^3\,c\,C\,d^3\,e\,f^2\,g^2\,h^2\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] -$$

$$\text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\Bigg(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\Bigg) -$$

$$\Bigg(10\,i\,b^3\,B\,d^4\,e\,f^2\,g^2\,h^2\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] -$$

$$\text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(10\,i\,a\,b^2\,C\,d^4\,e\,f^2\,g^2\,h^2\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(i\,b^3\,c^2\,C\,d^2\,f^3\,g^2\,h^2\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(10\,i\,b^3\,B\,c\,d^3\,f^3\,g^2\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(10\,i\,a\,b^2\,c\,C\,d^3\,f^3\,g^2\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(8\,i\,b^3\,C\,d^4\,e^3\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(8 i b^3 c C d^3 e^2 f g h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(10 i b^3 B d^4 e^2 f g h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(10\,i\,a\,b^2\,C\,d^4\,e^2\,f\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\right)\right)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,b^3\,c^2\,C\,d^2\,e\,f^2\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\right)\right)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(10\,i\,b^3\,B\,c\,d^3\,e\,f^2\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(10\,i\,a\,b^2\,c\,C\,d^3\,e\,f^2\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(30\,i\,a\,b^2\,B\,d^4\,e\,f^2\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\;(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(15\,i\,a^2\,b\,C\,d^4\,e\,f^2\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\;(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\,b^3\,c^3\,C\,d\,f^3\,g\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(30\,i\,a\,b^2\,B\,c\,d^3\,f^3\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/\right.$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(15\,i\,a^2\,b\,c\,C\,d^3\,f^3\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(8\,i\,b^3\,c\,C\,d^3\,e^3\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\right)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,b^3\,c^2\,C\,d^2\,e^2\,f\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\right)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(10\,i\,b^3 B c d^3 e^2 f h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(10\,i\,a b^2 c C d^3 e^2 f h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(i\, b^3\, c^3\, C\, d\, e\, f^2\, h^4 \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ (-d\,g+c\,h)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(30\, i\, a\, b^2\, B\, c\, d^3\, e\, f^2\, h^4 \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ (-d\,g+c\,h)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(15\, i\, a^2\, b\, c\, C\, d^3\, e\, f^2\, h^4 \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(8\,i\,b^3\,c^4\,C\,f^3\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(10\,i\,b^3\,B\,c^3\,d\,f^3\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(10\,i\,a\,b^2\,c^3\,C\,d\,f^3\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(30\,i\,a\,b^2\,B\,c^2\,d^2\,f^3\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(15\,i\,a^2\,b\,c^2\,C\,d^2\,f^3\,h^4\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(4\,i\,b^3\,C\,d^3\,e\,f^2\,g^2\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(4\,i\,b^3\,c\,C\,d^2\,f^3\,g^2\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(4 i b^3 C d^3 e^2 f g h^2 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\right.$$

$$\left.\text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f (-d g+c h)}{(-d e+c f) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(i b^3 c C d^2 e f^2 g h^2 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\right.$$

$$\left.\text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f (-d g+c h)}{(-d e+c f) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(5 i b^3 B d^3 e f^2 g h^2 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\right.$$

$$\left.\text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f (-d g+c h)}{(-d e+c f) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(5\,i\,a\,b^2\,C\,d^3\,e\,f^2\,g\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(3\,i\,b^3\,c^2\,C\,d\,f^3\,g\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(5\,i\,b^3\,B\,c\,d^2\,f^3\,g\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(5\,i\,a\,b^2\,c\,C\,d^2\,f^3\,g\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(4\,i\,b^3\,c\,C\,d^2\,e^2\,f\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(3\,i\,b^3\,c^2\,C\,d\,e\,f^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(5\,i\,b^3\,B\,c\,d^2\,e\,f^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\,-$$

$$\left(5\,i\,a\,b^2\,c\,C\,d^2\,e\,f^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\,+$$

$$\left(8\,i\,b^3\,c^3\,C\,f^3\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\,-\left(10\,i\,b^3\,B\,c^2\,d\,f^3\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.$$

$$\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f (-d g+c h)}{(-d e+c f) h}\right]\Bigg) \Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) -$$

$$\Bigg(10\, i\, a\, b^2\, c^2\, C\, d\, f^3\, h^3 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}$$

$$\text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f (-d g+c h)}{(-d e+c f) h}\right]\Bigg) \Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) +$$

$$\Bigg(30\, i\, a\, b^2\, B\, c\, d^2\, f^3\, h^3 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}$$

$$\text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f (-d g+c h)}{(-d e+c f) h}\right]\Bigg) \Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) -$$

$$\Bigg(15\, i\, a^2\, b\, c\, C\, d^2\, f^3\, h^3 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(15\,i\,a^2\,b\,B\,d^3\,f^3\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(15\,i\,a^3\,C\,d^3\,f^3\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\Bigg/$$

$$\left.\left.\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\right)\right)$$

Problem 17: Result unnecessarily involves imaginary or complex numbers.

$$\int\frac{a\,b\,B-a^2\,C+b^2\,B\,x+b^2\,C\,x^2}{\sqrt{c+d\,x}\ \sqrt{e+f\,x}\ \sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 410 leaves, 7 steps):

$$\frac{2\,b^2\,C\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{3\,d\,f\,h}+$$

$$\left(2\,b^2\,\sqrt{-d\,e+c\,f}\,\left(3\,B\,d\,f\,h-2\,C\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\sqrt{\frac{d\,\left(e+f\,x\right)}{d\,e-c\,f}}\,\sqrt{g+h\,x}\right.$$

$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{\left(d\,e-c\,f\right)\,h}{f\,\left(d\,g-c\,h\right)}\right]\right)\Big/\left(3\,d^2\,f^{3/2}\,h^2\,\sqrt{e+f\,x}\,\sqrt{\frac{d\,\left(g+h\,x\right)}{d\,g-c\,h}}\right)+$$

$$\left(2\,\sqrt{-d\,e+c\,f}\,\left(3\,a\,b\,B\,d\,f\,h^2-3\,a^2\,C\,d\,f\,h^2-b^2\,\left(3\,B\,d\,f\,g\,h-C\,\left(c\,h\,\left(f\,g-e\,h\right)+d\,g\,\left(2\,f\,g+e\,h\right)\right)\right)\right)\right.$$

$$\left.\sqrt{\frac{d\,\left(e+f\,x\right)}{d\,e-c\,f}}\,\sqrt{\frac{d\,\left(g+h\,x\right)}{d\,g-c\,h}}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{\left(d\,e-c\,f\right)\,h}{f\,\left(d\,g-c\,h\right)}\right]\right)\Big/$$

$$\left(3\,d^2\,f^{3/2}\,h^2\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)$$

Result (type 4, 569 leaves) :

$$\frac{2\,b^2\,C\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{3\,d\,f\,h}+$$

$$\frac{1}{3\,d^3\sqrt{-c+\frac{d\,e}{f}}\,f^2\,h^2\sqrt{e+\frac{(c+d\,x)\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\sqrt{g+\frac{(c+d\,x)\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}}(c+d\,x)^{3/2}\left(-2\,b^2\sqrt{-c+\frac{d\,e}{f}}\right.$$

$$\left(-3\,B\,d\,f\,h+2\,C\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\left(f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}\right)\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)-\frac{1}{\sqrt{c+d\,x}}$$

$$2\,i\,b^2\left(-d\,e+c\,f\right)h\left(3\,B\,d\,f\,h-2\,C\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\sqrt{1-\frac{c}{c+d\,x}+\frac{d\,e}{f\left(c+d\,x\right)}}$$

$$\sqrt{1-\frac{c}{c+d\,x}+\frac{d\,g}{h\left(c+d\,x\right)}}\,\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]+\frac{1}{\sqrt{c+d\,x}}$$

$$2\,i\,d\,h\left(3\,a\,b\,B\,d\,f^2\,h-3\,a^2\,C\,d\,f^2\,h+b^2\left(-3\,B\,d\,e\,f\,h+c\,C\,f\left(-f\,g+e\,h\right)+C\,d\,e\left(f\,g+2\,e\,h\right)\right)\right)$$

$$\sqrt{1-\frac{c}{c+d\,x}+\frac{d\,e}{f\left(c+d\,x\right)}}\sqrt{1-\frac{c}{c+d\,x}+\frac{d\,g}{h\left(c+d\,x\right)}}$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]\right)$$

Problem 18: Result unnecessarily involves imaginary or complex numbers.

$$\int\frac{a\,b\,B-a^2\,C+b^2\,B\,x+b^2\,C\,x^2}{\left(a+b\,x\right)\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 291 leaves, 7 steps):

$$\left(2\,b\,C\,\sqrt{-d\,e+c\,f}\,\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{g+h\,x}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]\right)\Big/$$

$$\left(d\,\sqrt{f}\,h\,\sqrt{e+f\,x}\,\sqrt{\frac{d\,(g+h\,x)}{d\,g-c\,h}}\right)-$$

$$\left(2\,\sqrt{-d\,e+c\,f}\,(b\,C\,g-b\,B\,h+a\,C\,h)\,\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{\frac{d\,(g+h\,x)}{d\,g-c\,h}}\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]\right)\Big/\left(d\,\sqrt{f}\,h\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)$$

Result (type 4, 326 leaves):

$$\left(2\left(b\,C\,d^2\,\sqrt{-c+\frac{d\,e}{f}}\,(e+f\,x)\,(g+h\,x)+i\,b\,C\,(d\,e-c\,f)\,h\,(c+d\,x)^{3/2}\,\sqrt{\frac{d\,(e+f\,x)}{f\,(c+d\,x)}}\,\sqrt{\frac{d\,(g+h\,x)}{h\,(c+d\,x)}}\right.\right.$$

$$\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]-i\,d\,(b\,C\,e-b\,B\,f+a\,C\,f)\,h\,(c+d\,x)^{3/2}$$

$$\left.\left.\sqrt{\frac{d\,(e+f\,x)}{f\,(c+d\,x)}}\,\sqrt{\frac{d\,(g+h\,x)}{h\,(c+d\,x)}}\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]\right)\right)\Big/$$

$$\left(d^2\,\sqrt{-c+\frac{d\,e}{f}}\,f\,h\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)$$

Problem 19: Result unnecessarily involves imaginary or complex numbers.

$$\int\frac{a\,b\,B-a^2\,C+b^2\,B\,x+b^2\,C\,x^2}{(a+b\,x)^2\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 309 leaves, 10 steps):

$$\left(2\,C\,\sqrt{-d\,e+c\,f}\,\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{\frac{d\,(g+h\,x)}{d\,g-c\,h}}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\,\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]\right)\Big/$$
$$\left(d\,\sqrt{f}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)-$$
$$\left(2\,(b\,B-2\,a\,C)\,\sqrt{-d\,e+c\,f}\,\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{\frac{d\,(g+h\,x)}{d\,g-c\,h}}\,\text{EllipticPi}\left[-\frac{b\,(d\,e-c\,f)}{(b\,c-a\,d)\,f},\right.\right.$$
$$\left.\left.\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\,\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,\sqrt{f}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)$$

Result (type 4, 248 leaves):

$$\left(2\,i\,\sqrt{e+f\,x}\,\sqrt{\frac{d\,(g+h\,x)}{h\,(c+d\,x)}}\right.$$
$$\left(-(b\,c\,C-b\,B\,d+a\,C\,d)\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]+\right.$$
$$\left.\left.(-b\,B+2\,a\,C)\,d\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,f}{b\,(-d\,e+c\,f)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-c+\frac{d\,e}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{d\,f\,g-c\,f\,h}{d\,e\,h-c\,f\,h}\right]\right)\right)\Big/$$
$$\left((-b\,c+a\,d)\,\sqrt{-c+\frac{d\,e}{f}}\,f\,\sqrt{\frac{d\,(e+f\,x)}{f\,(c+d\,x)}}\,\sqrt{g+h\,x}\right)$$

Problem 20: Result unnecessarily involves complex numbers and more than twice size of optimal antiderivative.

$$\int\frac{a\,b\,B-a^2\,C+b^2\,B\,x+b^2\,C\,x^2}{(a+b\,x)^3\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 680 leaves, 13 steps):

$$-\frac{b^2 (bB-2aC) \sqrt{c+dx} \sqrt{e+fx} \sqrt{g+hx}}{(bc-ad)(be-af)(bg-ah)(a+bx)}+\left(b (bB-2aC) \sqrt{f} \sqrt{-de+cf} \sqrt{\frac{d(e+fx)}{de-cf}} \sqrt{g+hx}\ \text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\sqrt{c+dx}}{\sqrt{-de+cf}}\right], \frac{(de-cf)h}{f(dg-ch)}\right]\right)\Big/$$

$$\left((bc-ad)(be-af)(bg-ah)\sqrt{e+fx}\sqrt{\frac{d(g+hx)}{dg-ch}}-\right.$$

$$\left((bB-2aC)\sqrt{f}\sqrt{-de+cf}\sqrt{\frac{d(e+fx)}{de-cf}}\sqrt{\frac{d(g+hx)}{dg-ch}}\ \text{EllipticF}\left[\right.\right.$$

$$\left.\left.\text{ArcSin}\left[\frac{\sqrt{f}\sqrt{c+dx}}{\sqrt{-de+cf}}\right], \frac{(de-cf)h}{f(dg-ch)}\right]\right)\Big/\left((bc-ad)(be-af)\sqrt{e+fx}\sqrt{g+hx}\right)-$$

$$\left(\sqrt{-de+cf}\left(4a^3 Cdfh+2ab^2 B(dfg+deh+cfh)-b^3(Bdeg-c(2Ceg-Bfg-Beh))-\right.\right.$$

$$\left.\left.a^2 b(3Bdfh+2C(dfg+deh+cfh))\right)\sqrt{\frac{d(e+fx)}{de-cf}}\sqrt{\frac{d(g+hx)}{dg-ch}}\right.$$

$$\left.\text{EllipticPi}\left[-\frac{b(de-cf)}{(bc-ad)f}, \text{ArcSin}\left[\frac{\sqrt{f}\sqrt{c+dx}}{\sqrt{-de+cf}}\right], \frac{(de-cf)h}{f(dg-ch)}\right]\right)\Big/$$

$$\left((bc-ad)^2\sqrt{f}(be-af)(bg-ah)\sqrt{e+fx}\sqrt{g+hx}\right)$$

Result (type 4, 16821 leaves):

$$-\frac{b^2 (bB-2aC) \sqrt{c+dx} \sqrt{e+fx} \sqrt{g+hx}}{(bc-ad)(be-af)(bg-ah)(a+bx)}-\frac{1}{d(-bc+ad)(-be+af)(-bg+ah)}$$

$$\left(\frac{b(bB-2aC)(c+dx)^{3/2}\left(f+\frac{de}{c+dx}-\frac{cf}{c+dx}\right)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{\sqrt{e+\frac{(c+dx)\left(f-\frac{cf}{c+dx}\right)}{d}}\sqrt{g+\frac{(c+dx)\left(h-\frac{ch}{c+dx}\right)}{d}}}+\right.$$

$$\left.(c+dx)\left(-b+\frac{bc}{c+dx}-\frac{ad}{c+dx}\right)\sqrt{f+\frac{de}{c+dx}-\frac{cf}{c+dx}}\sqrt{h+\frac{dg}{c+dx}-\frac{ch}{c+dx}}\right.$$

$$\sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}$$

$$\left(\left((b c-a d) h\left(-2 b^2 C e g+b^2 B f g+b^2 B e h-2 a b B f h+2 a^2 C f h\right)\right)\Big/\right.$$

$$\left(\left(-b g+a h\right)\sqrt{f+\frac{d e}{c+d x}-\frac{c f}{c+d x}}\sqrt{h+\frac{d g}{c+d x}-\frac{c h}{c+d x}}\right)-$$

$$\frac{b\left(b B-2 a C\right)(d e-c f)\sqrt{h+\frac{d g}{c+d x}-\frac{c h}{c+d x}}}{\sqrt{f+\frac{d e}{c+d x}-\frac{c f}{c+d x}}}+$$

$$\left(b\left(2 b^3 c C e g-b^3 B d e g-b^3 B c f g+2 a b^2 B d f g-2 a^2 b C d f g-b^3 B c e h+\right.\right.$$

$$\left.2 a b^2 B d e h-2 a^2 b C d e h+2 a b^2 B c f h-2 a^2 b c C f h-3 a^2 b B d f h+4 a^3 C d f h\right)$$

$$\left.\sqrt{h+\frac{d g}{c+d x}-\frac{c h}{c+d x}}\right)\Big/\left(\left(-b g+a h\right)\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\sqrt{f+\frac{d e}{c+d x}-\frac{c f}{c+d x}}\right)\Bigg)$$

$$\left(\left(\left(i b^2 B d^2 e f g\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-d e+c f) h}{f(-d g+c h)}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\right)\Big/$$

$$\left((b c-a d)(-d e+c f)\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g+d e h-2 c f h}{c+d x}\right)\right)-\left(2 i a b C d^2 e f g\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\right.$$

$$\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(-d\,e+c\,f)\right.$$

$$\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}-$$

$$\left(i\,b^2\,B\,c\,d\,f^2\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\right)\Big/$$

$$\left((b\,c-a\,d)\,(-d\,e+c\,f)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}+\left(2\,i\,a\,b\,c\,C\,d\,f^2\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.\right.$$

$$\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(-d\,e+c\,f)\right.$$

$$\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\right)}-$$

$$\left(i b^2 B c d e f h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(-d e+c f) h}{f (-d g+c h)}\right]-\text{EllipticF}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\right)\Big/$$

$$\left((b c-a d)\ (-d e+c f)\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\right.}\right.$$

$$\left.\left.\frac{d f g+d e h-2 c f h}{c+d x}\right)\right)+\left(2 i a b c C d e f h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\right.$$

$$\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\right)\Big/\left((b c-a d)\ (-d e+c f)\right.$$

$$\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\right)}+$$

$$\left(i b^2 B c^2 f^2 h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\frac{(-d e+c f) h}{f (-d g+c h)}\Big] - \text{EllipticF}\Big[i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Bigg) \Big/$$

$$\Bigg((b c-a d)\ (-d e+c f) \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Big(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+$$

$$\frac{d f g+d e h-2 c f h}{c+d x}\Big)\Bigg) - \Bigg(2 i a b c^2 C f^2 h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}$$

$$\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \Bigg(\text{EllipticE}\Big[i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big] -$$

$$\text{EllipticF}\Big[i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Bigg) \Big/ \Bigg((b c-a d)\ (-d e+c f)$$

$$\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Big(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\Big)}\Bigg) -$$

$$\Bigg(i b^3 B d^2 e g \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticF}\Big[$$

$$i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg) \Big/ \Bigg((b c-a d)^2 \sqrt{-\frac{-d g+c h}{h}}$$

$$\sqrt{\Big(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\Big)}\Bigg) +$$

$$\left(2\,i\,a\,b^2\,C\,d^2\,e\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,b^2\,C\,d\,e\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,b^3\,B\,c\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,a\,b^2\,c\,C\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,b^2\,B\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,a\,b\,C\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\, b^3\, B\, c\, d\, e\, h \sqrt{1-\frac{-d\, e+c\, f}{f\,(c+d\, x)}}\ \sqrt{1-\frac{-d\, g+c\, h}{h\,(c+d\, x)}}\ \text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\, g+c\, h}{h}}}{\sqrt{c+d\, x}}\right],\ \frac{(-d\, e+c\, f)\, h}{f\,(-d\, g+c\, h)}\right]\right) \Big/ \left((b\, c-a\, d)^2 \sqrt{-\frac{-d\, g+c\, h}{h}}\right.$$

$$\left.\sqrt{\left(f\, h+\frac{d^2\, e\, g-c\, d\, f\, g-c\, d\, e\, h+c^2\, f\, h}{(c+d\, x)^2}+\frac{d\, f\, g+d\, e\, h-2\, c\, f\, h}{c+d\, x}\right)}\right) -$$

$$\left(2\, i\, a\, b^2\, c\, C\, d\, e\, h \sqrt{1-\frac{-d\, e+c\, f}{f\,(c+d\, x)}}\ \sqrt{1-\frac{-d\, g+c\, h}{h\,(c+d\, x)}}\ \text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\, g+c\, h}{h}}}{\sqrt{c+d\, x}}\right],\ \frac{(-d\, e+c\, f)\, h}{f\,(-d\, g+c\, h)}\right]\right) \Big/ \left((b\, c-a\, d)^2 \sqrt{-\frac{-d\, g+c\, h}{h}}\right.$$

$$\left.\sqrt{\left(f\, h+\frac{d^2\, e\, g-c\, d\, f\, g-c\, d\, e\, h+c^2\, f\, h}{(c+d\, x)^2}+\frac{d\, f\, g+d\, e\, h-2\, c\, f\, h}{c+d\, x}\right)}\right) -$$

$$\left(2\, i\, b^2\, B\, d\, e\, h \sqrt{1-\frac{-d\, e+c\, f}{f\,(c+d\, x)}}\ \sqrt{1-\frac{-d\, g+c\, h}{h\,(c+d\, x)}}\ \text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\, g+c\, h}{h}}}{\sqrt{c+d\, x}}\right],\ \frac{(-d\, e+c\, f)\, h}{f\,(-d\, g+c\, h)}\right]\right) \Big/ \left((b\, c-a\, d) \sqrt{-\frac{-d\, g+c\, h}{h}}\right.$$

$$\left.\sqrt{\left(f\, h+\frac{d^2\, e\, g-c\, d\, f\, g-c\, d\, e\, h+c^2\, f\, h}{(c+d\, x)^2}+\frac{d\, f\, g+d\, e\, h-2\, c\, f\, h}{c+d\, x}\right)}\right) +$$

$$\left(2\,i\,a\,b\,C\,d\,e\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\,b^3\,B\,c^2\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,a\,b^2\,c^2\,C\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,b^2\,B\,c\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(4\,i\,a\,b\,c\,C\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,a\,b\,B\,d\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,a^2\,C\,d\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\Big[\right.$$

$$i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\Big)\Big/\left((b\,c-a\,d)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+\frac{1}{(b\,c-a\,d)^3}$$

$$b^4\,B\,d^2\,e\,g\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\Big[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.$$

$$i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\Big)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.$$

$$\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\Big[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\Big[\right.\right.$$

$$\left.\left.\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\Big],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\Big]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\right.\right.$$

$$\left.\left.\left.\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)}\right)\right)-\frac{1}{(b\,c-a\,d)^3}$$

$$2\,a\,b^3\,C\,d^2\,e\,g\left(\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)-$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\right.\right.$$

$$\left.\left.\left.\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)-\frac{1}{(b\,c-a\,d)^2}$$

$$2\,b^3\,C\,d\,e\,g\left(\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)-$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.$$

$$\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-$$

$$\frac{1}{(b\,c-a\,d)^3}b^4\,B\,c\,d\,f\,g\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)+\frac{1}{(b c-a d)^3}$$

$$2 a b^3 c C d f g\left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)-$$

$$\left(\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.$$

$$\left.\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/\left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.$$

$$\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)+$$

$$\frac{1}{(b c-a d)^2} 2 b^3 B d f g\left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\right.\right.\right.$$

$$\left.\left.\left.\frac{(b c-a d) h}{b (-d g+c h)},\ i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\left(\text{i}\, a d\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left.\text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\ \text{i}\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/$$

$$\left(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\frac{1}{(b c-a d)^2}$$

$$2 a b^2 C d f g\left(\left(\text{i}\, c\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\right.\right.\right.$$

$$\left.\left.\left.\text{i}\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\right.\right.\right.$$

$$\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-$$

$$\left(\text{i}\, a d\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/\Bigg(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\Bigg)\Bigg)-$$

$$\frac{1}{(b c-a d)^3}b^4 B c d e h\left(\left(i c\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\ i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\right]\Bigg/\right.$$

$$\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\left(i a d\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\text{EllipticPi}\left[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\ i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\right]\Bigg/$$

$$\left(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+\frac{1}{(b c-a d)^3}$$

$$2\,a\,b^3\,c\,C\,d\,e\,h\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.$$

$$\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.\right.$$

$$\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)+$$

$$\frac{1}{(b\,c-a\,d)^2}2\,b^3\,B\,d\,e\,h\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left(\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}$$

$$\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\Bigg)\Bigg/$$

$$\Bigg(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\right.$$

$$\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\Bigg)-\frac{1}{(b c-a d)^2}$$

$$2 a b^2 C d e h\left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Bigg/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\right.$$

$$\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.$$

$$\left.i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\Bigg)\Bigg/\left(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\right.\right.$$

$$\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)+$$

$$\frac{1}{(b\,c-a\,d)^3}b^4\,B\,c^2\,f\,h\left(\left(\left(i\,c\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\;\text{EllipticPi}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\right/$$

$$\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\left.\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-\left(\left(i\,a\,d\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.\right.\right.$$

$$\left.\left.\left.\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\right/$$

$$\left(b\sqrt{-\frac{-d\,g+c\,h}{h}}\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)-\frac{1}{(b\,c-a\,d)^3}$$

$$2\,a\,b^3\,c^2\,C\,f\,h\left(\left(\left(i\,c\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\;\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\right.\right.$$

$$\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-$$

$$\left(i\,a d\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/\left(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)-$$

$$\frac{1}{(b c-a d)^2}2 b^3 B c f h\left(\left(i\,c\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\left[\right.\right.\right.$$

$$\frac{(b c-a d)\,h}{b\,(-d g+c h)},\ i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/$$

$$\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\left(i\,a d\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\Bigg) \Bigg/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+\frac{1}{(b c-a d)^2}$$

$$4 a b^2 c C f h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\frac{1}{(b c-a d)^2} 2 a b^2 B d f h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)\right)+\frac{1}{(b c-a d)^2}$$

$$2 a^2 b C d f h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-$$

$$\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg) \Big/ \Bigg(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Big(f h+$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)\Bigg)+$$

$$\frac{1}{b c-a d} b^2 B f h \Bigg(\Bigg(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg) \Big/ \Bigg(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Big(f h+$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-$$

$$\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg) \Big/ \Bigg(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Big(f h+$$

$$\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)\Bigg)\Bigg)-$$

$$\frac{1}{b c-a d} 2 a b C f h\Bigg(\Bigg(\Bigg(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[$$

$$\frac{(b c-a d) h}{b (-d g+c h)}, i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+$$

$$\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)\Bigg)-\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}$$

$$\text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)}, i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+$$

$$\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)\Bigg)\Bigg)\Bigg)\Bigg)\Bigg/$$

$$\Bigg(\Bigg(b^2 B f h-2 a b C f h+\frac{b^2 B d^2 e g}{(c+d x)^2}-\frac{2 a b C d^2 e g}{(c+d x)^2}-\frac{b^2 B c d f g}{(c+d x)^2}+\frac{2 a b c C d f g}{(c+d x)^2}-$$

$$\frac{b^2 B c d e h}{(c+d x)^2}+\frac{2 a b c C d e h}{(c+d x)^2}+$$

$$\frac{b^2 B c^2 f h}{(c+d x)^2} - \frac{2 a b c^2 C f h}{(c+d x)^2} - \frac{2 b^2 C d e g}{c+d x} + \frac{2 b^2 B d f g}{c+d x} - \frac{2 a b C d f g}{c+d x} + \frac{2 b^2 B d e h}{c+d x} - \frac{2 a b C d e h}{c+d x} - \frac{2 b^2 B c f h}{c+d x} + \frac{4 a b c C f h}{c+d x} - \frac{2 a b B d f h}{c+d x} + \frac{2 a^2 C d f h}{c+d x}\Bigg) \sqrt{e+\frac{(c+d x)\left(f-\frac{c f}{c+d x}\right)}{d}} \sqrt{g+\frac{(c+d x)\left(h-\frac{c h}{c+d x}\right)}{d}}\Bigg)$$

Problem 21: Result more than twice size of optimal antiderivative.

$$\int \frac{\sqrt{a+b x}\,\left(a b B - a^2 C + b^2 B x + b^2 C x^2\right)}{\sqrt{c+d x}\,\sqrt{e+f x}\,\sqrt{g+h x}}\,dx$$

Optimal (type 4, 980 leaves, 9 steps) :

$$\frac{1}{4\,d\,f^2\,h^2\,\sqrt{c+d\,x}}b\left(4\,b\,B\,d\,f\,h+C\left(a\,d\,f\,h-3\,b\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\sqrt{a+b\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}+\frac{b^2\,C\,\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{2\,d\,f\,h}-$$

$$\left(b\,\sqrt{d\,g-c\,h}\,\sqrt{f\,g-e\,h}\,\left(4\,b\,B\,d\,f\,h+C\left(a\,d\,f\,h-3\,b\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\sqrt{a+b\,x}\right.$$

$$\left.\sqrt{-\frac{\left(d\,e-c\,f\right)\left(g+h\,x\right)}{\left(f\,g-e\,h\right)\left(c+d\,x\right)}}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d\,g-c\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}}\right],\frac{\left(b\,c-a\,d\right)\left(f\,g-e\,h\right)}{\left(b\,e-a\,f\right)\left(d\,g-c\,h\right)}\right]\right)\Big/$$

$$\left(4\,d^2\,f^2\,h^2\sqrt{\frac{\left(d\,e-c\,f\right)\left(a+b\,x\right)}{\left(b\,e-a\,f\right)\left(c+d\,x\right)}}\,\sqrt{g+h\,x}\right)+$$

$$\left(\left(b\,e-a\,f\right)\sqrt{b\,g-a\,h}\,\left(a\,C\,d\,f\,h-b\left(4\,B\,d\,f\,h-C\left(3\,d\,f\,g+3\,d\,e\,h+c\,f\,h\right)\right)\right)\sqrt{\frac{\left(b\,e-a\,f\right)\left(c+d\,x\right)}{\left(d\,e-c\,f\right)\left(a+b\,x\right)}}\right.$$

$$\left.\sqrt{g+h\,x}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],-\frac{\left(b\,c-a\,d\right)\left(f\,g-e\,h\right)}{\left(d\,e-c\,f\right)\left(b\,g-a\,h\right)}\right]\right)\Big/$$

$$\left(4\,d\,f^2\,h^2\,\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{\left(b\,e-a\,f\right)\left(g+h\,x\right)}{\left(f\,g-e\,h\right)\left(a+b\,x\right)}}\right)-\frac{1}{4\,d^2\,\sqrt{b\,c-a\,d}\,f^2\,h^3\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}}$$

$$\sqrt{-d\,g+c\,h}\,\left(\left(a\,d\,f\,h+b\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\left(4\,b\,B\,d\,f\,h+C\left(a\,d\,f\,h-3\,b\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)+\right.$$

$$\left.4\,d\,f\,h\left(2\,a^2\,C\,d\,f\,h+b^2\,C\left(d\,e\,g+c\,f\,g+c\,e\,h\right)-a\,b\left(4\,B\,d\,f\,h-C\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\right)$$

$$\left(a+b\,x\right)\sqrt{\frac{\left(b\,g-a\,h\right)\left(c+d\,x\right)}{\left(d\,g-c\,h\right)\left(a+b\,x\right)}}\,\sqrt{\frac{\left(b\,g-a\,h\right)\left(e+f\,x\right)}{\left(f\,g-e\,h\right)\left(a+b\,x\right)}}$$

$$\text{EllipticPi}\left[-\frac{b\left(d\,g-c\,h\right)}{\left(b\,c-a\,d\right)h},\text{ArcSin}\left[\frac{\sqrt{b\,c-a\,d}\,\sqrt{g+h\,x}}{\sqrt{-d\,g+c\,h}\,\sqrt{a+b\,x}}\right],\frac{\left(b\,e-a\,f\right)\left(d\,g-c\,h\right)}{\left(b\,c-a\,d\right)\left(f\,g-e\,h\right)}\right]$$

Result (type 4, 21 555 leaves) : Display of huge result suppressed !

Problem 22: Result more than twice size of optimal antiderivative.

$$\int\frac{a\,b\,B-a^2\,C+b^2\,B\,x+b^2\,C\,x^2}{\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 734 leaves, 8 steps) :

$$\frac{b C \sqrt{a+b x}\ \sqrt{e+f x}\ \sqrt{g+h x}}{f h \sqrt{c+d x}} - \left(b C \sqrt{d g-c h}\ \sqrt{f g-e h}\ \sqrt{a+b x}\ \sqrt{-\frac{(d e-c f)\ (g+h x)}{(f g-e h)\ (c+d x)}}\right.$$

$$\left. \text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d g-c h}\ \sqrt{e+f x}}{\sqrt{f g-e h}\ \sqrt{c+d x}}\right], \frac{(b c-a d)\ (f g-e h)}{(b e-a f)\ (d g-c h)}\right]\right) \Big/$$

$$\left(d f h \sqrt{\frac{(d e-c f)\ (a+b x)}{(b e-a f)\ (c+d x)}}\ \sqrt{g+h x}\right) - \left(C\ (b e-a f)\ \sqrt{b g-a h}\ \sqrt{\frac{(b e-a f)\ (c+d x)}{(d e-c f)\ (a+b x)}}\right.$$

$$\left. \sqrt{g+h x}\ \text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b g-a h}\ \sqrt{e+f x}}{\sqrt{f g-e h}\ \sqrt{a+b x}}\right], -\frac{(b c-a d)\ (f g-e h)}{(d e-c f)\ (b g-a h)}\right]\right) \Big/$$

$$\left(f h \sqrt{f g-e h}\ \sqrt{c+d x}\ \sqrt{-\frac{(b e-a f)\ (g+h x)}{(f g-e h)\ (a+b x)}}\right) -$$

$$\left(\sqrt{-d g+c h}\ (a C d f h-b\ (2 B d f h-C\ (d f g+d e h+c f h)))\ (a+b x)\ \sqrt{\frac{(b g-a h)\ (c+d x)}{(d g-c h)\ (a+b x)}}\right.$$

$$\sqrt{\frac{(b g-a h)\ (e+f x)}{(f g-e h)\ (a+b x)}}\ \text{EllipticPi}\left[-\frac{b\ (d g-c h)}{(b c-a d)\ h}, \text{ArcSin}\left[\frac{\sqrt{b c-a d}\ \sqrt{g+h x}}{\sqrt{-d g+c h}\ \sqrt{a+b x}}\right],\right.$$

$$\left.\left. \frac{(b e-a f)\ (d g-c h)}{(b c-a d)\ (f g-e h)}\right]\right) \Big/ \left(d \sqrt{b c-a d}\ f h^2 \sqrt{c+d x}\ \sqrt{e+f x}\right)$$

Result (type 4, 6667 leaves) :

$$\frac{1}{d^2} 2 \left(\left(b C\ (c+d x)^{3/2} \left(f+\frac{d e}{c+d x}-\frac{c f}{c+d x}\right) \left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right) \sqrt{a+\frac{(c+d x)\ \left(b-\frac{b c}{c+d x}\right)}{d}}\right) \Big/ \right.$$

$$\left(2 f h \sqrt{e+\frac{(c+d x)\ \left(f-\frac{c f}{c+d x}\right)}{d}}\ \sqrt{g+\frac{(c+d x)\ \left(h-\frac{c h}{c+d x}\right)}{d}}\right) -$$

$$\left(d\ (b g-a h)\ (d g-c h)\ (b C f g+b C e h-2 b B f h+2 a C f h)\ \sqrt{c+d x}\ \sqrt{\left(\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\right.\right.$$

$$\left.\left. \left(f+\frac{d e}{c+d x}-\frac{c f}{c+d x}\right) \left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)\right) \sqrt{a+\frac{(c+d x)\ \left(b-\frac{b c}{c+d x}\right)}{d}}}\right.$$

$$\left(\left(\left(d e \sqrt{-\frac{(b c-a d)\,(-d g+c h)\left(-\frac{b}{b c-a d}+\frac{1}{c+d x}\right)}{-b d g+a d h}}\left(-\frac{f}{-d e+c f}+\frac{1}{c+d x}\right)\sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}\left(\left(\left(-b d g+a d h\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(d e-c f)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d\,(-f g+e h)}}\right],\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\frac{(b c-a d)\,(-f g+e h)}{(-d e+c f)\,(-b g+a h)}\right]\right)\Big/\left((b c-a d)\,(-d g+c h)\right)-\frac{1}{b c-a d}b\,\text{EllipticF}\left[\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(d e-c f)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d\,(-f g+e h)}}\right],\frac{(b c-a d)\,(-f g+e h)}{(-d e+c f)\,(-b g+a h)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-d e+c f}+\frac{1}{c+d x}}{-\frac{f}{-d e+c f}+\frac{h}{-d g+c h}}}\sqrt{\left(b+\frac{-b c+a d}{c+d x}\right)\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(c f\right.$$

$$\sqrt{-\frac{(b c-a d)\,(-d g+c h)\left(-\frac{b}{b c-a d}+\frac{1}{c+d x}\right)}{-b d g+a d h}}\left(-\frac{f}{-d e+c f}+\frac{1}{c+d x}\right)\sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}$$

$$\left(\left(\left(\left(-b d g+a d h\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(d e-c f)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d\,(-f g+e h)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(b c-a d)\,(-f g+e h)}{(-d e+c f)\,(-b g+a h)}\right]\right)\Big/\left((b c-a d)\,(-d g+c h)\right)-\frac{1}{b c-a d}b\,\text{EllipticF}\left[\right.\right.\right.$$

$$\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(d e-c f)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d\,(-f g+e h)}}\right],\frac{(b c-a d)\,(-f g+e h)}{(-d e+c f)\,(-b g+a h)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-d e+c f}+\frac{1}{c+d x}}{-\frac{f}{-d e+c f}+\frac{h}{-d g+c h}}}\sqrt{\left(b+\frac{-b c+a d}{c+d x}\right)\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(f\sqrt{\frac{-\frac{b}{b c-a d}+\frac{1}{c+d x}}{-\frac{b}{b c-a d}+\frac{h}{-d g+c h}}}\sqrt{\frac{-\frac{f}{-d e+c f}+\frac{1}{c+d x}}{-\frac{f}{-d e+c f}+\frac{h}{-d g+c h}}}\left(-\frac{h}{-d g+c h}+\frac{1}{c+d x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-d e+c f)\left(-h-\frac{d g}{c+d x}+\frac{c h}{c+d x}\right)}{d(-f g+e h)}}\right],\frac{(b c-a d)(-f g+e h)}{(-d e+c f)(-b g+a h)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}\sqrt{\left(b+\frac{-b c+a d}{c+d x}\right)\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)\Bigg)\Bigg/$$

$$\left(2 f h^2(f g-e h)\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\sqrt{e+\frac{(c+d x)\left(f-\frac{c f}{c+d x}\right)}{d}}\right.$$

$$\left.\sqrt{g+\frac{(c+d x)\left(h-\frac{c h}{c+d x}\right)}{d}}\right)+$$

$$\left(d(b e-a f)(d e-c f)(b C f g+b C e h-2 b B f h+2 a C f h)\sqrt{c+d x}\right.$$

$$\sqrt{\left(\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\left(f+\frac{d e}{c+d x}-\frac{c f}{c+d x}\right)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)\right)}$$

$$\sqrt{a+\frac{(c+d x)\left(b-\frac{b c}{c+d x}\right)}{d}}$$

$$\left(\left(d g\sqrt{-\frac{(b c-a d)(-d g+c h)\left(-\frac{b}{b c-a d}+\frac{1}{c+d x}\right)}{-b d g+a d h}}\left(-\frac{f}{-d e+c f}+\frac{1}{c+d x}\right)\sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}\right.\right.$$

$$\left.\left(\left((-b d g+a d h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(d e-c f)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d(-f g+e h)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(b c-a d)(-f g+e h)}{(-d e+c f)(-b g+a h)}\right]\right)\Bigg/\left((b c-a d)(-d g+c h)\right)-\frac{1}{b c-a d}b\,\text{EllipticF}\left[\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{(d e-c f)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d(-f g+e h)}}\right],\frac{(b c-a d)(-f g+e h)}{(-d e+c f)(-b g+a h)}\right]\right)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-\left(ch\right.$$

$$\sqrt{-\frac{(bc-ad)(-dg+ch)\left(-\frac{b}{bc-ad}+\frac{1}{c+dx}\right)}{-bdg+adh}}\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}$$

$$\left(\left(\left(-bdg+adh\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\right.\right.$$

$$\left.\left.\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/\left((bc-ad)(-dg+ch)\right)-\frac{1}{bc-ad}b\,\text{EllipticF}\left[\right.$$

$$\left.\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)+$$

$$\left(h\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d(-fg+eh)}}\right],\frac{(bc-ad)(-fg+eh)}{(-de+cf)(-bg+ah)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)\Bigg)\Bigg)\Big/$$

$$\left(2f^2h\left(fg-eh\right)\left(b-\frac{bc}{c+dx}+\frac{ad}{c+dx}\right)\sqrt{e+\frac{(c+dx)\left(f-\frac{cf}{c+dx}\right)}{d}}\right.$$

$$\left.\sqrt{g+\frac{(c+dx)\left(h-\frac{ch}{c+dx}\right)}{d}}\right)+$$

$$\frac{1}{2 f^2 h^2 \left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right) \sqrt{e+\frac{(c+d x)\left(f-\frac{c f}{c+d x}\right)}{d}} \sqrt{g+\frac{(c+d x)\left(h-\frac{c h}{c+d x}\right)}{d}}}$$

$$b \left(b C d f g+b C d e h+b c C f h-2 b B d f h+a C d f h\right) \sqrt{c+d x} \sqrt{\left(\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\left(f+\frac{d e}{c+d x}-\frac{c f}{c+d x}\right)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)\right)} \sqrt{a+\frac{(c+d x)\left(b-\frac{b c}{c+d x}\right)}{d}}$$

$$\left(\left(d^2 e g \sqrt{-\frac{(b c-a d)(-d g+c h)\left(-\frac{b}{b c-a d}+\frac{1}{c+d x}\right)}{-b d g+a d h}}\left(-\frac{f}{-d e+c f}+\frac{1}{c+d x}\right) \sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}\left(\left(\left(-b d g+a d h\right) \text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(d e-c f)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d(-f g+e h)}}\right], \frac{(b c-a d)(-f g+e h)}{(-d e+c f)(-b g+a h)}\right]\right) \Big/ \left((b c-a d)(-d g+c h)\right)-\frac{1}{b c-a d} b \text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(d e-c f)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{d(-f g+e h)}}\right], \frac{(b c-a d)(-f g+e h)}{(-d e+c f)(-b g+a h)}\right]\right)\right) \Big/ \left(\sqrt{\frac{-\frac{f}{-d e+c f}+\frac{1}{c+d x}}{-\frac{f}{-d e+c f}+\frac{h}{-d g+c h}}} \sqrt{\left(b+\frac{-b c+a d}{c+d x}\right)\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(c d f g \sqrt{-\frac{(b c-a d)(-d g+c h)\left(-\frac{b}{b c-a d}+\frac{1}{c+d x}\right)}{-b d g+a d h}}\left(-\frac{f}{-d e+c f}+\frac{1}{c+d x}\right) \sqrt{\frac{-\frac{h}{-d g+c h}+\frac{1}{c+d x}}{\frac{f}{-d e+c f}-\frac{h}{-d g+c h}}}\right.$$

$$\left(\left(\left(-b\,d\,g+a\,d\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\right.\right.$$

$$\left.\left.\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\right)-\frac{1}{b\,c-a\,d}$$

$$b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\,\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\,\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(c\,d\,e\,h\,\sqrt{-\frac{\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\,\left(-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}\right)}{-b\,d\,g+a\,d\,h}}\right.$$

$$\left(-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}\right)\,\sqrt{\frac{-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}}{\frac{f}{-d\,e+c\,f}-\frac{h}{-d\,g+c\,h}}}$$

$$\left(\left(\left(-b\,d\,g+a\,d\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\right.\right.$$

$$\left.\left.\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\right)-\frac{1}{b\,c-a\,d}$$

$$b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}{d\,\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(b\,c-a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-d\,e+c\,f\right)\,\left(-b\,g+a\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\,\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\,\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(c^2\,f\,h\,\sqrt{-\frac{\left(b\,c-a\,d\right)\,\left(-d\,g+c\,h\right)\,\left(-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}\right)}{-b\,d\,g+a\,d\,h}}\right.$$

$$\left(-\frac{f}{-de+cf}+\frac{1}{c+dx}\right)\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}$$

$$\left(\left(\left(-bdg+adh\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(bc-ad)\left(-fg+eh\right)}{(-de+cf)\left(-bg+ah\right)}\right]\right)\Big/\left(\left((bc-ad)\left(-dg+ch\right)\right)-\frac{1}{bc-ad}\right.$$

$$\left.b\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(de-cf)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\right],\frac{(bc-ad)\left(-fg+eh\right)}{(-de+cf)\left(-bg+ah\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)+$$

$$\left(dfg\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\right],\frac{(bc-ad)\left(-fg+eh\right)}{(-de+cf)\left(-bg+ah\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)+$$

$$\left(deh\sqrt{\frac{-\frac{b}{bc-ad}+\frac{1}{c+dx}}{-\frac{b}{bc-ad}+\frac{h}{-dg+ch}}}\sqrt{\frac{-\frac{f}{-de+cf}+\frac{1}{c+dx}}{-\frac{f}{-de+cf}+\frac{h}{-dg+ch}}}\left(-\frac{h}{-dg+ch}+\frac{1}{c+dx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-de+cf)\left(-h-\frac{dg}{c+dx}+\frac{ch}{c+dx}\right)}{d\left(-fg+eh\right)}}\right],\frac{(bc-ad)\left(-fg+eh\right)}{(-de+cf)\left(-bg+ah\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-dg+ch}+\frac{1}{c+dx}}{\frac{f}{-de+cf}-\frac{h}{-dg+ch}}}\sqrt{\left(b+\frac{-bc+ad}{c+dx}\right)\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-$$

$$\left(2\,c\,f\,h\,\sqrt{\frac{-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}}{-\frac{b}{b\,c-a\,d}+\frac{h}{-d\,g+c\,h}}}\,\sqrt{\frac{-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}}{-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}}}\,\left(-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-d\,e+c\,f)\left(-h-\frac{d\,g}{c+d\,x}+\frac{c\,h}{c+d\,x}\right)}{d\,(-f\,g+e\,h)}}\right],\frac{(b\,c-a\,d)\,(-f\,g+e\,h)}{(-d\,e+c\,f)\,(-b\,g+a\,h)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}}{\frac{f}{-d\,e+c\,f}-\frac{h}{-d\,g+c\,h}}}\,\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(f\,(-d\,g+c\,h)\left(-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}\right)\sqrt{\frac{-\frac{b}{b\,c-a\,d}+\frac{1}{c+d\,x}}{-\frac{b}{b\,c-a\,d}+\frac{h}{-d\,g+c\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-d\,e+c\,f}+\frac{1}{c+d\,x}\right)\left(-\frac{h}{-d\,g+c\,h}+\frac{1}{c+d\,x}\right)}{\left(-\frac{f}{-d\,e+c\,f}+\frac{h}{-d\,g+c\,h}\right)^2}}\,\text{EllipticPi}\left[-\frac{-d\,f\,g+d\,e\,h}{(-d\,e+c\,f)\,h},\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(-d\,e+c\,f)\left(-h-\frac{d\,g}{c+d\,x}+\frac{c\,h}{c+d\,x}\right)}{d\,(-f\,g+e\,h)}}\right],\frac{(b\,c-a\,d)\,(-f\,g+e\,h)}{(-d\,e+c\,f)\,(-b\,g+a\,h)}\Bigg]\Bigg/$$

$$\left.\left.\left(\sqrt{\left(b+\frac{-b\,c+a\,d}{c+d\,x}\right)\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\right)\right)$$

Problem 24: Result more than twice size of optimal antiderivative.

$$\int\frac{a\,b\,B-a^2\,C+b^2\,B\,x+b^2\,C\,x^2}{(a+b\,x)^{5/2}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 616 leaves, 8 steps) :

$$\frac{2\,b\,(bB-2aC)\,d\,\sqrt{a+bx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{(bc-ad)\,(be-af)\,(bg-ah)\,\sqrt{c+dx}}-\frac{2\,b^2\,(bB-2aC)\,\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{(bc-ad)\,(be-af)\,(bg-ah)\,\sqrt{a+bx}}-$$

$$\left(2\,b\,(bB-2aC)\,\sqrt{dg-ch}\,\sqrt{fg-eh}\,\sqrt{a+bx}\,\sqrt{-\frac{(de-cf)\,(g+hx)}{(fg-eh)\,(c+dx)}}\right.$$

$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{dg-ch}\,\sqrt{e+fx}}{\sqrt{fg-eh}\,\sqrt{c+dx}}\right],\frac{(bc-ad)\,(fg-eh)}{(be-af)\,(dg-ch)}\right]\right)\Big/$$

$$\left((bc-ad)\,(be-af)\,(bg-ah)\,\sqrt{\frac{(de-cf)\,(a+bx)}{(be-af)\,(c+dx)}}\,\sqrt{g+hx}\right)+$$

$$\left(2\,(bcC-bBd+aCd)\,\sqrt{\frac{(be-af)\,(c+dx)}{(de-cf)\,(a+bx)}}\,\sqrt{g+hx}\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{bg-ah}\,\sqrt{e+fx}}{\sqrt{fg-eh}\,\sqrt{a+bx}}\right],-\frac{(bc-ad)\,(fg-eh)}{(de-cf)\,(bg-ah)}\right]\right)\Big/$$

$$\left((bc-ad)\,\sqrt{bg-ah}\,\sqrt{fg-eh}\,\sqrt{c+dx}\,\sqrt{-\frac{(be-af)\,(g+hx)}{(fg-eh)\,(a+bx)}}\right)$$

Result (type 4, 1753 leaves):

$$-\frac{2\,b^2\,(bB-2aC)\,\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{(bc-ad)\,(be-af)\,(bg-ah)\,\sqrt{a+bx}}+\frac{1}{b\,(-bc+ad)\,(-be+af)\,(-bg+ah)}$$

$$2\left(\left((-bB+2aC)\,(a+bx)^{5/2}\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)\Big/\right.$$

$$\left(\sqrt{c+\frac{(a+bx)\left(d-\frac{ad}{a+bx}\right)}{b}}\,\sqrt{e+\frac{(a+bx)\left(f-\frac{af}{a+bx}\right)}{b}}\,\sqrt{g+\frac{(a+bx)\left(h-\frac{ah}{a+bx}\right)}{b}}\right)-$$

$$\frac{1}{\sqrt{c+\frac{(a+bx)\left(d-\frac{ad}{a+bx}\right)}{b}}\,\sqrt{e+\frac{(a+bx)\left(f-\frac{af}{a+bx}\right)}{b}}\,\sqrt{g+\frac{(a+bx)\left(h-\frac{ah}{a+bx}\right)}{b}}}(bc-ad)\,(be-af)$$

$$(bg-ah)\,(a+bx)^{3/2}\sqrt{\left(\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)}$$

$$\left(-\left(\left(\left(b\,B\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\right.\right.\right.\right.$$

$$\left(-\left(\left(\left(b\,d\,g-b\,c\,h\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-$$

$$\left.\left.\left.\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\right)\Big/$$

$$\left.\left.\left.\left.\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)\right)+\right.\right.\right.\right.$$

$$\left(2\,a\,C\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\right.$$

$$\left(-\left(\left(\left(b\,d\,g-b\,c\,h\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-$$

$$\left.\left.\left.\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(C\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)\Bigg)$$

Problem 25: Result more than twice size of optimal antiderivative.

$$\int\frac{abB-a^2C+b^2Bx+b^2Cx^2}{(a+bx)^{7/2}\sqrt{c+dx}\sqrt{e+fx}\sqrt{g+hx}}\,dx$$

Optimal (type 4, 1128 leaves, 9 steps):

$$\left(2\,b\,d\,\left(9\,a^3\,C\,d\,f\,h-b^3\,\left(2\,B\,d\,e\,g-c\,\left(3\,C\,e\,g-2\,B\,f\,g-2\,B\,e\,h\right)\right)+a\,b^2\right.\right.$$
$$\left.\left(C\,\left(d\,e\,g+c\,f\,g+c\,e\,h\right)+4\,B\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)-a^2\,b\,\left(6\,B\,d\,f\,h+5\,C\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)$$
$$\left.\sqrt{a+b\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)\Big/\left(3\,\left(b\,c-a\,d\right)^2\,\left(b\,e-a\,f\right)^2\,\left(b\,g-a\,h\right)^2\,\sqrt{c+d\,x}\right)-$$
$$\frac{2\,b^2\,\left(b\,B-2\,a\,C\right)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{3\,\left(b\,c-a\,d\right)\,\left(b\,e-a\,f\right)\,\left(b\,g-a\,h\right)\,\left(a+b\,x\right)^{3/2}}-$$
$$\left(2\,b^2\,\left(9\,a^3\,C\,d\,f\,h-b^3\,\left(2\,B\,d\,e\,g-c\,\left(3\,C\,e\,g-2\,B\,f\,g-2\,B\,e\,h\right)\right)+a\,b^2\right.\right.$$
$$\left.\left(C\,\left(d\,e\,g+c\,f\,g+c\,e\,h\right)+4\,B\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)-a^2\,b\,\left(6\,B\,d\,f\,h+5\,C\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)$$
$$\left.\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)\Big/\left(3\,\left(b\,c-a\,d\right)^2\,\left(b\,e-a\,f\right)^2\,\left(b\,g-a\,h\right)^2\,\sqrt{a+b\,x}\right)-$$
$$\left(2\,b\,\sqrt{d\,g-c\,h}\,\sqrt{f\,g-e\,h}\,\left(9\,a^3\,C\,d\,f\,h-b^3\,\left(2\,B\,d\,e\,g-c\,\left(3\,C\,e\,g-2\,B\,f\,g-2\,B\,e\,h\right)\right)+\right.\right.$$
$$a\,b^2\,\left(C\,\left(d\,e\,g+c\,f\,g+c\,e\,h\right)+4\,B\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)-$$
$$\left.a^2\,b\,\left(6\,B\,d\,f\,h+5\,C\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\,\sqrt{a+b\,x}\,\sqrt{-\frac{\left(d\,e-c\,f\right)\,\left(g+h\,x\right)}{\left(f\,g-e\,h\right)\,\left(c+d\,x\right)}}$$
$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d\,g-c\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}}\right],\frac{\left(b\,c-a\,d\right)\,\left(f\,g-e\,h\right)}{\left(b\,e-a\,f\right)\,\left(d\,g-c\,h\right)}\right]\right)\Big/$$
$$\left(3\,\left(b\,c-a\,d\right)^2\,\left(b\,e-a\,f\right)^2\,\left(b\,g-a\,h\right)^2\,\sqrt{\frac{\left(d\,e-c\,f\right)\,\left(a+b\,x\right)}{\left(b\,e-a\,f\right)\,\left(c+d\,x\right)}}\,\sqrt{g+h\,x}\right)-$$
$$\left(2\,\left(3\,a^3\,C\,d^2\,f\,h-b^3\,\left(2\,B\,d^2\,e\,g-B\,c^2\,f\,h-c\,d\,\left(3\,C\,e\,g-B\,f\,g-B\,e\,h\right)\right)-\right.\right.$$
$$3\,a^2\,b\,d\,\left(B\,d\,f\,h+C\,\left(d\,f\,g+d\,e\,h-c\,f\,h\right)\right)+$$
$$\left.a\,b^2\,\left(3\,B\,d^2\,\left(f\,g+e\,h\right)+C\,\left(d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h-2\,c^2\,f\,h\right)\right)\right)\,\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(c+d\,x\right)}{\left(d\,e-c\,f\right)\,\left(a+b\,x\right)}}$$
$$\left.\sqrt{g+h\,x}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],-\frac{\left(b\,c-a\,d\right)\,\left(f\,g-e\,h\right)}{\left(d\,e-c\,f\right)\,\left(b\,g-a\,h\right)}\right]\right)\Big/$$
$$\left(3\,\left(b\,c-a\,d\right)^2\,\left(b\,e-a\,f\right)\,\left(b\,g-a\,h\right)^{3/2}\,\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{\left(b\,e-a\,f\right)\,\left(g+h\,x\right)}{\left(f\,g-e\,h\right)\,\left(a+b\,x\right)}}\right)$$

Result (type 4, 10645 leaves):

$$\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}$$
$$\left(-\frac{2\,b^2\,\left(b\,B-2\,a\,C\right)}{3\,\left(b\,c-a\,d\right)\,\left(b\,e-a\,f\right)\,\left(b\,g-a\,h\right)\,\left(a+b\,x\right)^2}-\left(2\,b^2\,\left(3\,b^3\,c\,C\,e\,g-2\,b^3\,B\,d\,e\,g+a\,b^2\,C\,d\,e\,g-\right.\right.\right.$$
$$2\,b^3\,B\,c\,f\,g+a\,b^2\,c\,C\,f\,g+4\,a\,b^2\,B\,d\,f\,g-5\,a^2\,b\,C\,d\,f\,g-2\,b^3\,B\,c\,e\,h+a\,b^2\,c\,C\,e\,h+$$
$$\left.\left.\left.4\,a\,b^2\,B\,d\,e\,h-5\,a^2\,b\,C\,d\,e\,h+4\,a\,b^2\,B\,c\,f\,h-5\,a^2\,b\,c\,C\,f\,h-6\,a^2\,b\,B\,d\,f\,h+9\,a^3\,C\,d\,f\,h\right)\right)\Big/$$

$$\left(3\,(b\,c-a\,d)^2\,(b\,e-a\,f)^2\,(b\,g-a\,h)^2\,(a+b\,x)\right)\Bigg) -$$

$$\frac{1}{3\,b\,(-b\,c+a\,d)^2\,(-b\,e+a\,f)^2\,(-b\,g+a\,h)^2}$$

$$2\Bigg(\Bigg(\Big(-3\,b^3\,c\,C\,e\,g+2\,b^3\,B\,d\,e\,g-a\,b^2\,C\,d\,e\,g+2\,b^3\,B\,c\,f\,g-a\,b^2\,c\,C\,f\,g-$$

$$4\,a\,b^2\,B\,d\,f\,g+5\,a^2\,b\,C\,d\,f\,g+2\,b^3\,B\,c\,e\,h-a\,b^2\,c\,C\,e\,h-4\,a\,b^2\,B\,d\,e\,h+$$
$$5\,a^2\,b\,C\,d\,e\,h-4\,a\,b^2\,B\,c\,f\,h+5\,a^2\,b\,c\,C\,f\,h+6\,a^2\,b\,B\,d\,f\,h-9\,a^3\,C\,d\,f\,h\Big)$$
$$(a+b\,x)^{5/2}\left(d+\frac{b\,c}{a+b\,x}-\frac{a\,d}{a+b\,x}\right)\left(f+\frac{b\,e}{a+b\,x}-\frac{a\,f}{a+b\,x}\right)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)\Big)\Big/$$
$$\left(\sqrt{c+\frac{(a+b\,x)\left(d-\frac{a\,d}{a+b\,x}\right)}{b}}\,\sqrt{e+\frac{(a+b\,x)\left(f-\frac{a\,f}{a+b\,x}\right)}{b}}\,\sqrt{g+\frac{(a+b\,x)\left(h-\frac{a\,h}{a+b\,x}\right)}{b}}\right) -$$

$$\frac{1}{\sqrt{c+\frac{(a+b\,x)\left(d-\frac{a\,d}{a+b\,x}\right)}{b}}\,\sqrt{e+\frac{(a+b\,x)\left(f-\frac{a\,f}{a+b\,x}\right)}{b}}\,\sqrt{g+\frac{(a+b\,x)\left(h-\frac{a\,h}{a+b\,x}\right)}{b}}}\,(b\,c-a\,d)\,(b\,e-a\,f)$$

$$(b\,g-a\,h)\,(a+b\,x)^{3/2}\sqrt{\left(\left(d+\frac{b\,c}{a+b\,x}-\frac{a\,d}{a+b\,x}\right)\left(f+\frac{b\,e}{a+b\,x}-\frac{a\,f}{a+b\,x}\right)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)\right)}$$

$$\Bigg(-\Bigg(\Bigg(3\,b^3\,c\,C\,e\,g\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\Bigg(-\Bigg(\Bigg(\Big((b\,d\,g-b\,c\,h)\,\text{EllipticE}\Big[$$

$$\text{ArcSin}\Big[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\Big],\ \frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Big)\Big/$$

$$\big((b\,c-a\,d)\,(b\,g-a\,h)\big)\Bigg) - \frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\Big],\ \frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2 b^3 B d e g \sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d} d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(a b^2 C d e g \sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d} d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2b^3BcfgE\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Big[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(ab^2cCfgE\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Big[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\left((b c-a d)\ (b g-a h)\right)\right)\Bigg)\Bigg(-\frac{1}{-b c+a d}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\,(-f g+e h)}}\Big],\frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\Bigg)-$$

$$\Bigg(4 a b^2 B d f g\sqrt{\frac{(b c-a d)\ (b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\Bigg(-\Bigg(\Bigg(\Bigg((b d g-b c h)\,\text{EllipticE}\Big[$$

$$\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\,(-f g+e h)}}\Big],\frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\left((b c-a d)\ (b g-a h)\right)\right)\Bigg)\Bigg(-\frac{1}{-b c+a d}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\,(-f g+e h)}}\Big],\frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\Bigg)+$$

$$\Bigg(5 a^2 b C d f g\sqrt{\frac{(b c-a d)\ (b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\Bigg(-\Bigg(\Bigg(\Bigg((b d g-b c h)\,\text{EllipticE}\Big[$$

$$\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\,\right],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Bigg]\Bigg/$$

$$\left((b c-a d)(b g-a h)\right)\Bigg) - \frac{1}{-b c+a d} d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\,\right],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2 b^3 B c e h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\,\right],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg/\right.$$

$$\left((b c-a d)(b g-a h)\right)\Bigg) - \frac{1}{-b c+a d} d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\,\right],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(a b^2 c C e h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-\left(4ab^2Bdeh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(5\,a^2\,b\,C\,d\,e\,h\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\,\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\left.\right]\Big)\Big/$$

$$\left.\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(4\,a\,b^2\,B\,c\,f\,h\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\,\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\left.\right]\Big)\Big/$$

$$\left.\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\right],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(5a^2bcCfh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(6a^2bBdfh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\Big],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(9 a^3 C d f h\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\Big],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\Big],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(b^2 B d f g\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-b e+a f)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\Big],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(2\,a\,b\,C\,d\,f\,g\,\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(b^2\,B\,d\,e\,h\,\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(2\,a\,b\,C\,d\,e\,h\,\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(b^2\,B\,c\,f\,h\,\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\left(-f\,g+e\,h\right)}}\,\right],\,\frac{\left(-b\,c+a\,d\right)\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}-\right.$$

$$\left(2abcCfh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}-\right.$$

$$\left(3abBdfh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}+\right.$$

$$\left(6a^2Cdfh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)/$$

$$\left.\left.\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)\right)\right)$$

Problem 26: Result unnecessarily involves complex numbers and more than twice size of optimal antiderivative.

$$\int \frac{(a+b\,x)^2\,(A+C\,x^2)}{\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 1097 leaves, 9 steps):

$$\frac{1}{105\,d^3\,f^3\,h^3}2\,(4\,C\,(2\,a\,d\,f\,h-3\,b\,(d\,f\,g+d\,e\,h+c\,f\,h))\,(a\,d\,f\,h-2\,b\,(d\,f\,g+d\,e\,h+c\,f\,h))+5\,b\,d\,f\,h\,(7\,A\,b\,d\,f\,h-C\,(5\,b\,(d\,e\,g+c\,f\,g+c\,e\,h)+2\,a\,(d\,f\,g+d\,e\,h+c\,f\,h))))\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}+\frac{1}{35\,d^2\,f^2\,h^2}4\,C\,(2\,a\,d\,f\,h-3\,b\,(d\,f\,g+d\,e\,h+c\,f\,h))\,(a+b\,x)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}+\frac{2\,C\,(a+b\,x)^2\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{7\,d\,f\,h}-\frac{1}{105\,d^4\,f^{7/2}\,h^4\,\sqrt{e+f\,x}}4\,\sqrt{-d\,e+c\,f}\,\left(35\,a^2\,C\,d^2\,f^2\,h^2\,(d\,f\,g+d\,e\,h+c\,f\,h)-7\,a\,b\,d\,f\,h\,(15\,A\,d^2\,f^2\,h^2+C\,(8\,c^2\,f^2\,h^2+7\,c\,d\,f\,h\,(f\,g+e\,h)+d^2\,(8\,f^2\,g^2+7\,e\,f\,g\,h+8\,e^2\,h^2)))+b^2\,(35\,A\,d^2\,f^2\,h^2\,(d\,f\,g+d\,e\,h+c\,f\,h)+2\,C\,(12\,c^3\,f^3\,h^3+10\,c^2\,d\,f^2\,h^2\,(f\,g+e\,h)+c\,d^2\,f\,h\,(10\,f^2\,g^2+9\,e\,f\,g\,h+10\,e^2\,h^2)+2\,d^3\,(6\,f^3\,g^3+5\,e\,f^2\,g^2\,h+5\,e^2\,f\,g\,h^2+6\,e^3\,h^3))))\,\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{g+h\,x}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]+\frac{1}{105\,d^4\,f^{7/2}\,h^4\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}2\,\sqrt{-d\,e+c\,f}\,\left(35\,a^2\,d^2\,f^2\,h^2\,(3\,A\,d\,f\,h^2+C\,(c\,h\,(f\,g-e\,h)+d\,g\,(2\,f\,g+e\,h)))-14\,a\,b\,d\,f\,h\,(15\,A\,d^2\,f^2\,g\,h^2+C\,(4\,c^2\,f\,h^2\,(f\,g-e\,h)+c\,d\,h\,(3\,f^2\,g^2+e\,f\,g\,h-4\,e^2\,h^2)+d^2\,g\,(8\,f^2\,g^2+3\,e\,f\,g\,h+4\,e^2\,h^2)))+b^2\,(35\,A\,d^2\,f^2\,h^2\,(c\,h\,(f\,g-e\,h)+d\,g\,(2\,f\,g+e\,h))+C\,(24\,c^3\,f^2\,h^3\,(f\,g-e\,h)+c^2\,d\,f\,h^2\,(17\,f^2\,g^2+6\,e\,f\,g\,h-23\,e^2\,h^2)+2\,c\,d^2\,h\,(8\,f^3\,g^3+e\,f^2\,g^2\,h+3\,e^2\,f\,g\,h^2-12\,e^3\,h^3)+d^3\,g\,(48\,f^3\,g^3+16\,e\,f^2\,g^2\,h+17\,e^2\,f\,g\,h^2+24\,e^3\,h^3))))\,\sqrt{\frac{d\,(e+f\,x)}{d\,e-c\,f}}\,\sqrt{\frac{d\,(g+h\,x)}{d\,g-c\,h}}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{(d\,e-c\,f)\,h}{f\,(d\,g-c\,h)}\right]$$

Result (type 4, 18383 leaves):

$$\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\left(\frac{1}{105\,d^3\,f^3\,h^3}2\,(24\,b^2\,C\,d^2\,f^2\,g^2+23\,b^2\,C\,d^2\,e\,f\,g\,h+23\,b^2\,c\,C\,d\,f^2\,g\,h-56\,a\,b\,C\,d^2\,f^2\,g\,h+24\,b^2\,C\,d^2\,e^2\,h^2+23\,b^2\,c\,C\,d\,e\,f\,h^2-56\,a\,b\,C\,d^2\,e\,f\,h^2+24\,b^2\,c^2\,C\,f^2\,h^2-56\,a\,b\,c\,C\,d\,f^2\,h^2+35\,A\,b^2\,d^2\,f^2\,h^2+35\,a^2\,C\,d^2\,f^2\,h^2)-\frac{4\,b\,C\,(3\,b\,d\,f\,g+3\,b\,d\,e\,h+3\,b\,c\,f\,h-7\,a\,d\,f\,h)\,x}{35\,d^2\,f^2\,h^2}+\frac{2\,b^2\,C\,x^2}{7\,d\,f\,h}\right)+\frac{1}{105\,d^5\,f^3\,h^3}\left(\frac{1}{f\,h\,\sqrt{e+\frac{(c+d\,x)\,\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\,\sqrt{g+\frac{(c+d\,x)\,\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}}\right.$$

$$4\left(-24\,b^2\,C\,d^3\,f^3\,g^3-20\,b^2\,C\,d^3\,e\,f^2\,g^2\,h-20\,b^2\,c\,C\,d^2\,f^3\,g^2\,h+56\,a\,b\,C\,d^3\,f^3\,g^2\,h-20\,b^2\,C\,d^3\,e^2\,f\,g\,h^2-18\,b^2\,c\,C\,d^2\,e\,f^2\,g\,h^2+49\,a\,b\,C\,d^3\,e\,f^2\,g\,h^2-20\,b^2\,c^2\,C\,d\,f^3\,g\,h^2+49\,a\,b\,c\,C\,d^2\,f^3\,g\,h^2-35\,A\,b^2\,d^3\,f^3\,g\,h^2-35\,a^2\,C\,d^3\,f^3\,g\,h^2-24\,b^2\,C\,d^3\,e^3\,h^3-20\,b^2\,c\,C\,d^2\,e^2\,f\,h^3+56\,a\,b\,C\,d^3\,e^2\,f\,h^3-20\,b^2\,c^2\,C\,d\,e\,f^2\,h^3+49\,a\,b\,c\,C\,d^2\,e\,f^2\,h^3-35\,A\,b^2\,d^3\,e\,f^2\,h^3-35\,a^2\,C\,d^3\,e\,f^2\,h^3-24\,b^2\,c^3\,C\,f^3\,h^3+56\,a\,b\,c^2\,C\,d\,f^3\,h^3-35\,A\,b^2\,c\,d^2\,f^3\,h^3-35\,a^2\,c\,C\,d^2\,f^3\,h^3+105\,a\,A\,b\,d^3\,f^3\,h^3\right)$$
$$(c+d\,x)^{3/2}\left(f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}\right)\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)+$$
$$\frac{1}{f\,h\sqrt{e+\frac{(c+d\,x)\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\sqrt{g+\frac{(c+d\,x)\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}}\,2\,(c+d\,x)$$
$$\sqrt{\left(f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}\right)\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)}\left(\left(48\,i\,b^2\,C\,d^5\,e\,f^3\,g^4\,h\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.\right.$$
$$\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$
$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$
$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(48\,i\,b^2\,c\,C\,d^4\right.$$
$$f^4\,g^4\,h\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\right.\right.$$
$$\left.\left.\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\,(-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+\left(40\,i\,b^2 C d^5 e^2\right.$$

$$f^2 g^3 h^2\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.$$

$$\left.\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\,(-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(48\,i\,b^2 c C d^4\right.$$

$$e f^3 g^3 h^2\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.$$

$$\left.\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\,(-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(112\,i\,a b C d^5\right.$$

$$e f^3 g^3 h^2\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.$$

$$\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] - \text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\,\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) + \Bigg(8\,i\,b^2\,c^2\,C\,d^3$$

$$f^4\,g^3\,h^2\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\,\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\,\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big],$$

$$\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] - \text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\,\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) +$$

$$\Bigg(112\,i\,a\,b\,c\,C\,d^4\,f^4\,g^3\,h^2\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\,\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big] -$$

$$\text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\Big], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\Big]\Bigg)\Bigg) \Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\,\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) +$$

$$\left(40\,i\,b^2\,C\,d^5\,e^3\,f\,g^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(44\,i\,b^2\,c\,C\,d^4\,e^2\,f^2\,g^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(98\,i\,a\,b\,C\,d^5\,e^2\,f^2\,g^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] - \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/ \left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) +$$

$$\left(4\,\text{i}\,b^2 c^2 C d^3 e f^3 g^2 h^3 \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] - \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/ \left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) +$$

$$\left(112\,\text{i}\,a b c C d^4 e f^3 g^2 h^3 \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] -$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\Bigg(70\,i\,A\,b^2\,d^5\,e\,f^3\,g^2\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}$$

$$\Bigg(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\Bigg(70\,i\,a^2\,C\,d^5\,e\,f^3\,g^2\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}$$

$$\Bigg(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(14\,i\,a\,b\,c^2\,C\,d^3\,f^4\,g^2\,h^3\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(70\,i\,A\,b^2\,c\,d^4\,f^4\,g^2\,h^3\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(70\,i\,a^2\,c\,C\,d^4\,f^4\,g^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\;(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(48\,i\,b^2\,C\,d^5\,e^4\,g\,h^4\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\;(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(48\,i\,b^2\,c\,C\,d^4\,e^3\,f\,g\,h^4\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(112\,i\,a\,b\,C\,d^5\,e^3\,f\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/\right.$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(4\,i\,b^2\,c^2\,C\,d^3\,e^2\,f^2\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\Bigg(112\,i\,a\,b\,c\,C\,d^4\,e^2\,f^2\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\Bigg(70\,i\,A\,b^2\,d^5\,e^2\,f^2\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(70\,i\,a^2\,C\,d^5\,e^2\,f^2\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(4\,i\,b^2\,c^3\,C\,d^2\,e\,f^3\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(14\,i\,a\,b\,c^2\,C\,d^3\,e\,f^3\,g\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(70\,i\,A\,b^2\,c\,d^4\,e\,f^3\,g\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(70\,i\,a^2\,c\,C\,d^4\,e\,f^3\,g\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(210\,i\,a\,A\,b\,d^5\,e\,f^3\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(8\,i\,b^2\,c^4\,C\,d\,f^4\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.\right.\right.$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\Bigg(14\,i\,a\,b\,c^3\,C\,d^2\,f^4\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\Bigg(210\,i\,a\,A\,b\,c\,d^4\,f^4\,g\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\Bigg(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(48 i b^2 c C d^4 e^4 h^5\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(8 i b^2 c^2 C d^3 e^3 f h^5\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(112\,i\,a\,b\,c\,C\,d^4\,e^3\,f\,h^5\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(14\,i\,a\,b\,c^2\,C\,d^3\,e^2\,f^2\,h^5\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,(-d\,g+c\,h)\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-$$

$$\left(70\,i\,A\,b^2\,c\,d^4\,e^2\,f^2\,h^5\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] - \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/ \left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) -$$

$$\left(70\,\text{i}\,a^2 c C d^4 e^2 f^2 h^5 \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] - \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/ \left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) -$$

$$\left(8\,\text{i}\,b^2 c^4 C d e f^3 h^5 \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] -$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\Bigg(14\,i\,a\,b\,c^3\,C\,d^2\,e\,f^3\,h^5\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}$$

$$\Bigg(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \left(-d\,g+c\,h\right)\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\Bigg(210\,i\,a\,A\,b\,c\,d^4\,e\,f^3\,h^5\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}$$

$$\Bigg(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]-$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(48 i b^2 c^5 C f^4 h^5\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(112 i a b c^4 C d f^4 h^5\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(70 i A b^2 c^3 d^2 f^4 h^5\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(70\,i\,a^2 c^3 C d^2 f^4 h^5\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(210\,i\,a\,A\,b\,c^2 d^3 f^4 h^5\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg)\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(24\,i\,b^2\,C\,d^4\,e\,f^3\,g^3\,h\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(24\,i\,b^2\,c\,C\,d^3\,f^4\,g^3\,h\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(23\,i\,b^2\,C\,d^4\,e^2\,f^2\,g^2\,h^2\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(6\,i\,b^2\,c\,C\,d^3\,e\,f^3\,g^2\,h^2\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(56\,i\,a\,b\,C\,d^4\,e\,f^3\,g^2\,h^2\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(17\,i\,b^2\,c^2\,C\,d^2\,f^4\,g^2\,h^2\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(56\,i\,a\,b\,c\,C\,d^3\,f^4\,g^2\,h^2\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(24\,i\,b^2\,C\,d^4\,e^3\,f\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(6\,i\,b^2\,c\,C\,d^3\,e^2\,f^2\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Big/\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+\left(56\,i\,a\,b\,C\,d^4\,e^2\,f^2\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Big/\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+\left(2\,i\,b^2\,c^2\,C\,d^2\,e\,f^3\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Big/\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(14\,i\,a\,b\,c\,C\,d^3\,e\,f^3\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(35\,i\,A\,b^2\,d^4\,e\,f^3\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(35\,i\,a^2\,C\,d^4\,e\,f^3\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(16\,i\,b^2\,c^3\,C\,d\,f^4\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(42\,i\,a\,b\,c^2\,C\,d^2\,f^4\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(35\,i\,A\,b^2\,c\,d^3\,f^4\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(35\,i\,a^2\,c\,C\,d^3\,f^4\,g\,h^3\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(24\,i\,b^2\,c\,C\,d^3\,e^3\,f\,h^4\ \sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(17\,i\,b^2\,c^2\,C\,d^2\,e^2\,f^2\,h^4\ \sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Bigg/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(56\,i\,a\,b\,c\,C\,d^3\,e^2\,f^2\,h^4\ \sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(16\,i\,b^2\,c^3\,C\,d\,e\,f^3\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(42\,i\,a\,b\,c^2\,C\,d^2\,e\,f^3\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\left(\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\ \frac{f\left(-d\,g+c\,h\right)}{\left(-d\,e+c\,f\right)h}\right]\Big/\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(35\,i\,A\,b^2\,c\,d^3\,e\,f^3\,h^4\sqrt{1-\frac{-d\,e+c\,f}{f\left(c+d\,x\right)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\left(c+d\,x\right)}}\right.\right.$$

$$\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(35\,i\,a^2\,c\,C\,d^3\,e\,f^3\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg/\right.$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(48\,i\,b^2\,c^4\,C\,f^4\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg/\right.$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(112\,i\,a\,b\,c^3\,C\,d\,f^4\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\right.$$

$$\left.\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\ \text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\Bigg/\right.$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(70\, i\, A\, b^2\, c^2\, d^2\, f^4\, h^4\ \sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(70\, i\, a^2\, c^2\, C\, d^2\, f^4\, h^4\ \sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(210\, i\, a\, A\, b\, c\, d^3\, f^4\, h^4\ \sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\,(-d g+c h)}{(-d e+c f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(105\,i\,a^2\,A\,d^4\,f^4\,h^4\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right/$$

$$\left.\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)\right)$$

Problem 27: Result unnecessarily involves complex numbers and more than twice size of optimal antiderivative.

$$\int\frac{(a+b\,x)\,\left(A+C\,x^2\right)}{\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 611 leaves, 8 steps):

$$\frac{4\,C\,\left(a\,d\,f\,h-2\,b\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{15\,d^2\,f^2\,h^2}+$$

$$\frac{2\,C\,\left(a+b\,x\right)\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{5\,d\,f\,h}-\left(2\,\sqrt{-d\,e+c\,f}\,\left(10\,a\,C\,d\,f\,h\,\left(d\,f\,g+d\,e\,h+c\,f\,h\right)-\right.\right.$$

$$\left.\left.b\,\left(15\,A\,d^2\,f^2\,h^2+C\,\left(8\,c^2\,f^2\,h^2+7\,c\,d\,f\,h\,\left(f\,g+e\,h\right)+d^2\,\left(8\,f^2\,g^2+7\,e\,f\,g\,h+8\,e^2\,h^2\right)\right)\right)\right)$$

$$\sqrt{\frac{d\,\left(e+f\,x\right)}{d\,e-c\,f}}\,\sqrt{g+h\,x}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{\left(d\,e-c\,f\right)\,h}{f\,\left(d\,g-c\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(15\,d^3\,f^{5/2}\,h^3\,\sqrt{e+f\,x}\,\sqrt{\frac{d\,\left(g+h\,x\right)}{d\,g-c\,h}}\right)+$$

$$\left(2\,\sqrt{-d\,e+c\,f}\,\left(5\,a\,d\,f\,h\,\left(3\,A\,d\,f\,h^2+C\,\left(c\,h\,\left(f\,g-e\,h\right)+d\,g\,\left(2\,f\,g+e\,h\right)\right)\right)-b\,\left(15\,A\,d^2\,f^2\,g\,h^2+\right.\right.\right.$$

$$\left.\left.\left.C\,\left(4\,c^2\,f\,h^2\,\left(f\,g-e\,h\right)+c\,d\,h\,\left(3\,f^2\,g^2+e\,f\,g\,h-4\,e^2\,h^2\right)+d^2\,g\,\left(8\,f^2\,g^2+3\,e\,f\,g\,h+4\,e^2\,h^2\right)\right)\right)\right)$$

$$\sqrt{\frac{d\,\left(e+f\,x\right)}{d\,e-c\,f}}\,\sqrt{\frac{d\,\left(g+h\,x\right)}{d\,g-c\,h}}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\,\sqrt{c+d\,x}}{\sqrt{-d\,e+c\,f}}\right],\frac{\left(d\,e-c\,f\right)\,h}{f\,\left(d\,g-c\,h\right)}\right]\Bigg)\Bigg/$$

$$\left(15\,d^3\,f^{5/2}\,h^3\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)$$

Result (type 4, 8828 leaves):

$$\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\left(\frac{2\,C\,\left(-4\,b\,d\,f\,g-4\,b\,d\,e\,h-4\,b\,c\,f\,h+5\,a\,d\,f\,h\right)}{15\,d^2\,f^2\,h^2}+\frac{2\,b\,C\,x}{5\,d\,f\,h}\right)\,\sqrt{g+h\,x}\,-$$

$$\frac{1}{15\,d^4\,f^2\,h^2}\,2\,\left(\left(-8\,b\,C\,d^2\,f^2\,g^2-7\,b\,C\,d^2\,e\,f\,g\,h-7\,b\,c\,C\,d\,f^2\,g\,h+10\,a\,C\,d^2\,f^2\,g\,h-8\,b\,C\,d^2\,e^2\,h^2-\right.\right.$$

$$\left.\left.7\,b\,c\,C\,d\,e\,f\,h^2+10\,a\,C\,d^2\,e\,f\,h^2-8\,b\,c^2\,C\,f^2\,h^2+10\,a\,c\,C\,d\,f^2\,h^2-15\,A\,b\,d^2\,f^2\,h^2\right)$$

$$\left(c+d\,x\right)^{3/2}\,\left(f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}\right)\,\left(h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}\right)\Bigg)\Bigg/$$

$$\left(f\,h\,\sqrt{e+\frac{\left(c+d\,x\right)\,\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\,\sqrt{g+\frac{\left(c+d\,x\right)\,\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}\right)+$$

$$\frac{1}{f\,h\,\sqrt{e+\frac{\left(c+d\,x\right)\,\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\,\sqrt{g+\frac{\left(c+d\,x\right)\,\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}}$$

$$(c+dx)\sqrt{\left(f+\frac{de}{c+dx}-\frac{cf}{c+dx}\right)\left(h+\frac{dg}{c+dx}-\frac{ch}{c+dx}\right)}$$

$$\left(\left(8\,i\,b\,C\,d^4\,e\,f^2\,g^3\,h\sqrt{1-\frac{-de+cf}{f\,(c+dx)}}\sqrt{1-\frac{-dg+ch}{h\,(c+dx)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-de+cf}{f}}}{\sqrt{c+dx}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{f\,(-dg+ch)}{(-de+cf)\,h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-de+cf}{f}}}{\sqrt{c+dx}}\right],\frac{f\,(-dg+ch)}{(-de+cf)\,h}\right]\right)\right)\Bigg/$$

$$\left(\sqrt{-\frac{-de+cf}{f}}\,(-dg+ch)\sqrt{\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)-\left(8\,i\,b\,c\,C\,d^3\right.$$

$$f^3\,g^3\,h\sqrt{1-\frac{-de+cf}{f\,(c+dx)}}\sqrt{1-\frac{-dg+ch}{h\,(c+dx)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-de+cf}{f}}}{\sqrt{c+dx}}\right],\right.\right.$$

$$\left.\left.\left.\frac{f\,(-dg+ch)}{(-de+cf)\,h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-de+cf}{f}}}{\sqrt{c+dx}}\right],\frac{f\,(-dg+ch)}{(-de+cf)\,h}\right]\right)\right)\Bigg/$$

$$\left(\sqrt{-\frac{-de+cf}{f}}\,(-dg+ch)\sqrt{\left(f+\frac{de-cf}{c+dx}\right)\left(h+\frac{dg-ch}{c+dx}\right)}\right)+\left(7\,i\,b\,C\,d^4\,e^2\right.$$

$$f\,g^2\,h^2\sqrt{1-\frac{-de+cf}{f\,(c+dx)}}\sqrt{1-\frac{-dg+ch}{h\,(c+dx)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-de+cf}{f}}}{\sqrt{c+dx}}\right],\right.\right.$$

$$\left.\left.\left.\frac{f\,(-dg+ch)}{(-de+cf)\,h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-de+cf}{f}}}{\sqrt{c+dx}}\right],\frac{f\,(-dg+ch)}{(-de+cf)\,h}\right]\right)\right)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(8 i b c C d^3\right.$$

$$e f^2 g^2 h^2\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.$$

$$\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(10 i a C d^4 e f^2 g^2 h^2\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\Bigg/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(i b c^2 C d^2 f^3 g^2 h^2\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/\left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+\left(10\,i\,a\,c\,C\,d^3\,f^3\,g^2\,h^2\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/\left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+\left(8\,i\,b\,C\,d^4\,e^3\,g\,h^3\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(8 i b c C d^3 e^2 f g h^3\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(10 i a C d^4 e^2 f g h^3\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(i\, b\, c^2\, C\, d^2\, e\, f^2\, g\, h^3 \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}} \right.$$

$$\left(\text{EllipticE}\left[i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}} \right], \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h} \right] - \right.$$

$$\left. \left. \text{EllipticF}\left[i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}} \right], \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h} \right] \right) \right) /$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ (-d\,g+c\,h) \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)} \right) +$$

$$\left(10\, i\, a\, c\, C\, d^3\, e\, f^2\, g\, h^3 \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}} \right.$$

$$\left(\text{EllipticE}\left[i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}} \right], \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h} \right] - \right.$$

$$\left. \left. \text{EllipticF}\left[i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}} \right], \frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h} \right] \right) \right) /$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\ (-d\,g+c\,h) \sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)} \right) +$$

$$\left(15\, i\, A\, b\, d^4\, e\, f^2\, g\, h^3 \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\ \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}} \right.$$

$$\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] - \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/ \left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) -$$

$$\left(\text{i b c}^3 \text{C d f}^3 \text{g h}^3 \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] - \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/ \left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) -$$

$$\left(15\,\text{i A b c d}^3 \text{f}^3 \text{g h}^3 \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] - \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(8 i b c C d^3 e^3 h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(i b c^2 C d^2 e^2 f h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(10 i a c C d^3 e^2 f h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(i\,b\,c^3\,C\,d\,e\,f^2\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(15\,i\,A\,b\,c\,d^3\,e\,f^2\,h^4\sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\ \sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(8 i b c^4 C f^3 h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(10 i a c^3 C d f^3 h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\frac{f(-d g+c h)}{(-d e+c f)h}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ (-d g+c h)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+$$

$$\left(15 i A b c^2 d^2 f^3 h^4\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.$$

$$\left(\text{EllipticE}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right] - \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/ \left(\sqrt{-\frac{-d e+c f}{f}}\left(-d g+c h\right)\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) -$$

$$\left(4 \text{i} b C d^3 e f^2 g^2 h \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\,\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/ \left(\sqrt{-\frac{-d e+c f}{f}}\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) +$$

$$\left(4 \text{i} b c C d^2 f^3 g^2 h \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}\,\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right], \frac{f\left(-d g+c h\right)}{\left(-d e+c f\right) h}\right]\right) \Big/ \left(\sqrt{-\frac{-d e+c f}{f}}\sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right) -$$

$$4 \text{i} b C d^3 e^2 f g h^2 \sqrt{1-\frac{-d e+c f}{f\left(c+d x\right)}}\sqrt{1-\frac{-d g+c h}{h\left(c+d x\right)}}$$

$$\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\Bigg/$$

$$\left(\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}\ \sqrt{\left(\text{f}+\frac{\text{d e}-\text{c f}}{\text{c}+\text{d x}}\right)\left(\text{h}+\frac{\text{d g}-\text{c h}}{\text{c}+\text{d x}}\right)}\right)+\Bigg(\text{i b c C d}^2\,\text{e f}^2\,\text{g h}^2\sqrt{1-\frac{-\text{d e}+\text{c f}}{\text{f}\left(\text{c}+\text{d x}\right)}}$$

$$\sqrt{1-\frac{-\text{d g}+\text{c h}}{\text{h}\left(\text{c}+\text{d x}\right)}}\ \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}\ \sqrt{\left(\text{f}+\frac{\text{d e}-\text{c f}}{\text{c}+\text{d x}}\right)\left(\text{h}+\frac{\text{d g}-\text{c h}}{\text{c}+\text{d x}}\right)}\right)+$$

$$\Bigg(5\,\text{i a C d}^3\,\text{e f}^2\,\text{g h}^2\sqrt{1-\frac{-\text{d e}+\text{c f}}{\text{f}\left(\text{c}+\text{d x}\right)}}\ \sqrt{1-\frac{-\text{d g}+\text{c h}}{\text{h}\left(\text{c}+\text{d x}\right)}}$$

$$\text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}\ \sqrt{\left(\text{f}+\frac{\text{d e}-\text{c f}}{\text{c}+\text{d x}}\right)\left(\text{h}+\frac{\text{d g}-\text{c h}}{\text{c}+\text{d x}}\right)}\right)+\Bigg(3\,\text{i b c}^2\,\text{C d f}^3\,\text{g h}^2\sqrt{1-\frac{-\text{d e}+\text{c f}}{\text{f}\left(\text{c}+\text{d x}\right)}}$$

$$\sqrt{1-\frac{-\text{d g}+\text{c h}}{\text{h}\left(\text{c}+\text{d x}\right)}}\ \text{EllipticF}\left[\text{i ArcSinh}\left[\frac{\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}}{\sqrt{\text{c}+\text{d x}}}\right], \frac{\text{f}\left(-\text{d g}+\text{c h}\right)}{\left(-\text{d e}+\text{c f}\right)\text{h}}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{-\frac{-\text{d e}+\text{c f}}{\text{f}}}\ \sqrt{\left(\text{f}+\frac{\text{d e}-\text{c f}}{\text{c}+\text{d x}}\right)\left(\text{h}+\frac{\text{d g}-\text{c h}}{\text{c}+\text{d x}}\right)}\right)-$$

$$\left(5\,i\,a\,c\,C\,d^2\,f^3\,g\,h^2\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+\left(4\,i\,b\,c\,C\,d^2\,e^2\,f\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.$$

$$\left.\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)+$$

$$\left(3\,i\,b\,c^2\,C\,d\,e\,f^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,e+c\,f}{f}}\,\sqrt{\left(f+\frac{d\,e-c\,f}{c+d\,x}\right)\left(h+\frac{d\,g-c\,h}{c+d\,x}\right)}\right)-\left(5\,i\,a\,c\,C\,d^2\,e\,f^2\,h^3\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.$$

$$\left.\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,e+c\,f}{f}}}{\sqrt{c+d\,x}}\right],\,\frac{f\,(-d\,g+c\,h)}{(-d\,e+c\,f)\,h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+\left(8 i b c^3 C f^3 h^3 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\right.$$

$$\left.\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f (-d g+c h)}{(-d e+c f) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-\left(10 i a c^2 C d f^3 h^3 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\right.$$

$$\left.\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f (-d g+c h)}{(-d e+c f) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)+\left(15 i A b c d^2 f^3 h^3 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\right.$$

$$\left.\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\ \frac{f (-d g+c h)}{(-d e+c f) h}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)-$$

$$\left(15 i a A d^3 f^3 h^3 \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d e+c f}{f}}}{\sqrt{c+d x}}\right],\right.\right.$$

$$\left.\left.\frac{f (-d g+c h)}{(-d e+c f) h}\right]\right)\Big/\left(\sqrt{-\frac{-d e+c f}{f}}\ \sqrt{\left(f+\frac{d e-c f}{c+d x}\right)\left(h+\frac{d g-c h}{c+d x}\right)}\right)\Big)\Big)$$

Problem 28: Result unnecessarily involves imaginary or complex numbers.

$$\int \frac{A + C x^2}{\sqrt{c + d x}\ \sqrt{e + f x}\ \sqrt{g + h x}}\, dx$$

Optimal (type 4, 368 leaves, 7 steps):

$$\frac{2 C \sqrt{c + d x}\ \sqrt{e + f x}\ \sqrt{g + h x}}{3 d f h} - \left(4 C \sqrt{-d e + c f}\ (d f g + d e h + c f h) \sqrt{\frac{d (e + f x)}{d e - c f}}\ \sqrt{g + h x} \right.$$

$$\left. \text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\ \sqrt{c + d x}}{\sqrt{-d e + c f}}\right], \frac{(d e - c f) h}{f (d g - c h)}\right] \right) \Big/ \left(3 d^2 f^{3/2} h^2 \sqrt{e + f x} \sqrt{\frac{d (g + h x)}{d g - c h}} \right) +$$

$$\left(2 \sqrt{-d e + c f}\ (3 A d f h^2 + C (c h (f g - e h) + d g (2 f g + e h))) \sqrt{\frac{d (e + f x)}{d e - c f}} \sqrt{\frac{d (g + h x)}{d g - c h}} \right.$$

$$\left. \text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\ \sqrt{c + d x}}{\sqrt{-d e + c f}}\right], \frac{(d e - c f) h}{f (d g - c h)}\right] \right) \Big/ \left(3 d^2 f^{3/2} h^2 \sqrt{e + f x}\ \sqrt{g + h x} \right)$$

Result (type 4, 390 leaves):

$$\left(\sqrt{c + d x} \left(2 C d^2 f h (e + f x) (g + h x) - \frac{4 C d^2 (d f g + d e h + c f h) (e + f x) (g + h x)}{c + d x} - \right. \right.$$

$$4 i C \sqrt{-c + \frac{d e}{f}}\ f h (d f g + d e h + c f h) \sqrt{c + d x} \sqrt{\frac{d (e + f x)}{f (c + d x)}}$$

$$\sqrt{\frac{d (g + h x)}{h (c + d x)}}\ \text{EllipticE}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-c + \frac{d e}{f}}}{\sqrt{c + d x}}\right], \frac{d f g - c f h}{d e h - c f h}\right] + \frac{1}{\sqrt{-c + \frac{d e}{f}}}$$

$$\left. 2 i d h (3 A d f^2 h + c C f (-f g + e h) + C d e (f g + 2 e h)) \sqrt{c + d x} \sqrt{\frac{d (e + f x)}{f (c + d x)}} \sqrt{\frac{d (g + h x)}{h (c + d x)}} \right.$$

$$\left. \left. \text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-c + \frac{d e}{f}}}{\sqrt{c + d x}}\right], \frac{d f g - c f h}{d e h - c f h}\right] \right) \right) \Big/ \left(3 d^3 f^2 h^2 \sqrt{e + f x}\ \sqrt{g + h x} \right)$$

Problem 29: Result unnecessarily involves complex numbers and more than twice size of optimal antiderivative.

$$\int \frac{A + C x^2}{(a + b x)\sqrt{c + d x}\sqrt{e + f x}\sqrt{g + h x}}\, dx$$

Optimal (type 4, 465 leaves, 11 steps):

$$\left(2 C \sqrt{-d e + c f}\sqrt{\frac{d (e + f x)}{d e - c f}}\sqrt{g + h x}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f}\sqrt{c + d x}}{\sqrt{-d e + c f}}\right], \frac{(d e - c f) h}{f (d g - c h)}\right]\right) \Big/ \left(b d \sqrt{f} h \sqrt{e + f x}\sqrt{\frac{d (g + h x)}{d g - c h}}\right) - \left(2 C \sqrt{-d e + c f}\,(b g + a h)\sqrt{\frac{d (e + f x)}{d e - c f}}\sqrt{\frac{d (g + h x)}{d g - c h}}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f}\sqrt{c + d x}}{\sqrt{-d e + c f}}\right], \frac{(d e - c f) h}{f (d g - c h)}\right]\right) \Big/ \left(b^2 d \sqrt{f} h \sqrt{e + f x}\sqrt{g + h x}\right) - \left(2\left(A + \frac{a^2 C}{b^2}\right)\sqrt{-d e + c f}\sqrt{\frac{d (e + f x)}{d e - c f}}\sqrt{\frac{d (g + h x)}{d g - c h}}\,\text{EllipticPi}\left[-\frac{b (d e - c f)}{(b c - a d) f}, \text{ArcSin}\left[\frac{\sqrt{f}\sqrt{c + d x}}{\sqrt{-d e + c f}}\right], \frac{(d e - c f) h}{f (d g - c h)}\right]\right) \Big/ \left((b c - a d)\sqrt{f}\sqrt{e + f x}\sqrt{g + h x}\right)$$

Result (type 4, 13 075 leaves):

$$-\frac{1}{d^2} 2 \left(-\frac{C (c + d x)^{3/2}\left(f + \frac{d e}{c+d x} - \frac{c f}{c+d x}\right)\left(h + \frac{d g}{c+d x} - \frac{c h}{c+d x}\right)}{b f h \sqrt{e + \frac{(c+d x)\left(f - \frac{c f}{c+d x}\right)}{d}}\sqrt{g + \frac{(c+d x)\left(h - \frac{c h}{c+d x}\right)}{d}}} + \left((c + d x)\left(b - \frac{b c}{c + d x} + \frac{a d}{c + d x}\right)\sqrt{f + \frac{d e}{c + d x} - \frac{c f}{c + d x}}\sqrt{h + \frac{d g}{c + d x} - \frac{c h}{c + d x}} \right.$$

$$\sqrt{\left(f h + \frac{d^2 e g}{(c + d x)^2} - \frac{c d f g}{(c + d x)^2} - \frac{c d e h}{(c + d x)^2} + \frac{c^2 f h}{(c + d x)^2} + \frac{d f g}{c + d x} + \frac{d e h}{c + d x} - \frac{2 c f h}{c + d x}\right)}$$

$$\left(-\frac{d (b C e g + a C f g - a C e h + A b f h)}{b f (b g - a h)\sqrt{f + \frac{d e}{c+d x} - \frac{c f}{c+d x}}\sqrt{h + \frac{d g}{c+d x} - \frac{c h}{c+d x}}} -

$$\frac{a\,C\,d^3\,e\,g\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{b\,(b\,c-a\,d)\,f\,h\,(d\,g-c\,h)\,\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}-\frac{c^3\,C\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{(b\,c-a\,d)\,(-d\,g+c\,h)\,\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}+$$

$$\frac{a\,c^2\,C\,d\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{b\,(b\,c-a\,d)\,(-d\,g+c\,h)\,\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}+\frac{c^2\,C\,d\,e\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{(b\,c-a\,d)\,f\,(-d\,g+c\,h)\,\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}-$$

$$\frac{a\,c\,C\,d^2\,e\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{b\,(b\,c-a\,d)\,f\,(-d\,g+c\,h)\,\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}+$$

$$\frac{c^2\,C\,d\,g\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{(b\,c-a\,d)\,h\,(-d\,g+c\,h)\,\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}-$$

$$\frac{a\,c\,C\,d^2\,g\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{b\,(b\,c-a\,d)\,h\,(-d\,g+c\,h)\,\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}-$$

$$\frac{c\,C\,d^2\,e\,g\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{(b\,c-a\,d)\,f\,h\,(-d\,g+c\,h)\,\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}+$$

$$\left.\frac{(A\,b^2+a^2\,C)\,d\,\sqrt{h+\frac{d\,g}{c+d\,x}-\frac{c\,h}{c+d\,x}}}{b\,(b\,g-a\,h)\,\left(b-\frac{b\,c}{c+d\,x}+\frac{a\,d}{c+d\,x}\right)\sqrt{f+\frac{d\,e}{c+d\,x}-\frac{c\,f}{c+d\,x}}}\right)$$

$$\left(\left(i\,C\,d^2\,e\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\right.\right.\right.$$

$$\frac{(-d e+c f) h}{f (-d g+c h)}\Big] - \text{EllipticF}\Big[i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Big)\Big) \Big/$$

$$\Bigg((-d e+c f)\sqrt{-\frac{-d g+c h}{h}}\sqrt{\Big(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+$$

$$\frac{d f g+d e h-2 c f h}{c+d x}\Big)\Big) - \Bigg(i c C d f^2 g\sqrt{1-\frac{-d e+c f}{f (c+d x)}}\sqrt{1-\frac{-d g+c h}{h (c+d x)}}$$

$$\Bigg(\text{EllipticE}\Big[i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big] - \text{EllipticF}\Big[$$

$$i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Big) \Big/ \Bigg((-d e+c f)\sqrt{-\frac{-d g+c h}{h}}$$

$$\sqrt{\Big(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\Big)} -$$

$$\Bigg(i c C d e f h\sqrt{1-\frac{-d e+c f}{f (c+d x)}}\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\Bigg(\text{EllipticE}\Big[i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],$$

$$\frac{(-d e+c f) h}{f (-d g+c h)}\Big] - \text{EllipticF}\Big[i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Big)\Big) \Big/$$

$$\Bigg((-d e+c f)\sqrt{-\frac{-d g+c h}{h}}\sqrt{\Big(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+$$

$$\frac{d f g + d e h - 2 c f h}{c + d x}\Bigg)\Bigg) + \Bigg(i c^2 C f^2 h \sqrt{1 - \frac{-d e + c f}{f (c + d x)}} \sqrt{1 - \frac{-d g + c h}{h (c + d x)}}$$

$$\Bigg(\text{EllipticE}\Big[i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g + c h}{h}}}{\sqrt{c + d x}}\Big], \frac{(-d e + c f) h}{f (-d g + c h)}\Big] - \text{EllipticF}\Big[$$

$$i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g + c h}{h}}}{\sqrt{c + d x}}\Big], \frac{(-d e + c f) h}{f (-d g + c h)}\Big]\Bigg)\Bigg) \Big/ \Bigg((-d e + c f) \sqrt{-\frac{-d g + c h}{h}}$$

$$\sqrt{\Big(f h + \frac{d^2 e g - c d f g - c d e h + c^2 f h}{(c + d x)^2} + \frac{d f g + d e h - 2 c f h}{c + d x}\Big)} -$$

$$\Bigg(i b^2 c C d^2 e g \sqrt{1 - \frac{-d e + c f}{f (c + d x)}} \sqrt{1 - \frac{-d g + c h}{h (c + d x)}} \text{ EllipticF}\Big[$$

$$i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g + c h}{h}}}{\sqrt{c + d x}}\Big], \frac{(-d e + c f) h}{f (-d g + c h)}\Big]\Bigg) \Big/ \Bigg((b c - a d)^2 \sqrt{-\frac{-d g + c h}{h}}$$

$$\sqrt{\Big(f h + \frac{d^2 e g - c d f g - c d e h + c^2 f h}{(c + d x)^2} + \frac{d f g + d e h - 2 c f h}{c + d x}\Big)} +$$

$$\Bigg(i a b C d^3 e g \sqrt{1 - \frac{-d e + c f}{f (c + d x)}} \sqrt{1 - \frac{-d g + c h}{h (c + d x)}} \text{ EllipticF}\Big[$$

$$i \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g + c h}{h}}}{\sqrt{c + d x}}\Big], \frac{(-d e + c f) h}{f (-d g + c h)}\Big]\Bigg) \Big/ \Bigg((b c - a d)^2 \sqrt{-\frac{-d g + c h}{h}}$$

$$\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}+$$

$$\left(i\,b\,C\,d^2\,e\,g\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\;\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\;\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,b^2\,c^2\,C\,d\,f\,g\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\;\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\;\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\,a\,b\,c\,C\,d^2\,f\,g\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\;\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\;\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\, b\, c\, C\, d\, f\, g\, \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\, \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\, \text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right], \frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right) \Big/ \left((b\,c-a\,d)\, \sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right) +$$

$$\left(i\, b^2\, c^2\, C\, d\, e\, h\, \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\, \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\, \text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right], \frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right) \Big/ \left((b\,c-a\,d)^2\, \sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right) -$$

$$\left(i\, a\, b\, c\, C\, d^2\, e\, h\, \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\, \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\, \text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right], \frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right) \Big/ \left((b\,c-a\,d)^2\, \sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right) -$$

$$\left(i\, b\, c\, C\, d\, e\, h \sqrt{1 - \frac{-d\,e + c\,f}{f\,(c + d\,x)}} \sqrt{1 - \frac{-d\,g + c\,h}{h\,(c + d\,x)}}\ \text{EllipticF}\left[i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g + c\,h}{h}}}{\sqrt{c + d\,x}} \right], \frac{(-d\,e + c\,f)\,h}{f\,(-d\,g + c\,h)} \right] \Big/ \left((b\,c - a\,d) \sqrt{-\frac{-d\,g + c\,h}{h}} \sqrt{f\,h + \frac{d^2\,e\,g - c\,d\,f\,g - c\,d\,e\,h + c^2\,f\,h}{(c + d\,x)^2} + \frac{d\,f\,g + d\,e\,h - 2\,c\,f\,h}{c + d\,x}} \right) - \left(i\, b^2\, c^3\, C\, f\, h \sqrt{1 - \frac{-d\,e + c\,f}{f\,(c + d\,x)}} \sqrt{1 - \frac{-d\,g + c\,h}{h\,(c + d\,x)}}\ \text{EllipticF}\left[i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g + c\,h}{h}}}{\sqrt{c + d\,x}} \right], \frac{(-d\,e + c\,f)\,h}{f\,(-d\,g + c\,h)} \right] \Big/ \left((b\,c - a\,d)^2 \sqrt{-\frac{-d\,g + c\,h}{h}} \sqrt{f\,h + \frac{d^2\,e\,g - c\,d\,f\,g - c\,d\,e\,h + c^2\,f\,h}{(c + d\,x)^2} + \frac{d\,f\,g + d\,e\,h - 2\,c\,f\,h}{c + d\,x}} \right) + \left(i\, a\, b\, c^2\, C\, d\, f\, h \sqrt{1 - \frac{-d\,e + c\,f}{f\,(c + d\,x)}} \sqrt{1 - \frac{-d\,g + c\,h}{h\,(c + d\,x)}}\ \text{EllipticF}\left[i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g + c\,h}{h}}}{\sqrt{c + d\,x}} \right], \frac{(-d\,e + c\,f)\,h}{f\,(-d\,g + c\,h)} \right] \Big/ \left((b\,c - a\,d)^2 \sqrt{-\frac{-d\,g + c\,h}{h}} \sqrt{f\,h + \frac{d^2\,e\,g - c\,d\,f\,g - c\,d\,e\,h + c^2\,f\,h}{(c + d\,x)^2} + \frac{d\,f\,g + d\,e\,h - 2\,c\,f\,h}{c + d\,x}} \right) +$$

$$\left(2\,i\,b\,c^2\,C\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,A\,b\,d^2\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\frac{1}{(b\,c-a\,d)^3}b^3\,c\,C\,d^2\,e\,g\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.\right.$$

$$\left.\left.\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\right.$$

$$\left.\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\right.\right.\right.$$

$$\left.\left.\left.\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\right.\right.$$

$$\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\Bigg) \Bigg/$$

$$\left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\right.\right.\right.$$

$$\left.\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)-\frac{1}{(b c-a d)^3}$$

$$a b^2 C d^3 e g \left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\right.$$

$$\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\right.\right.\right.$$

$$\left.\left.\left.\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)-$$

$$\frac{1}{(b\,c-a\,d)^2}b^2\,C\,d^2\,e\,g\left(\left(\left(i\,c\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\;\text{EllipticPi}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-\left(\left(i\,a\,d\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.\right.$$

$$\left.\left.\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(b\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\right.\right.\right.$$

$$\left.\left.\left.\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)-\frac{1}{(b\,c-a\,d)^3}$$

$$b^3\,c^2\,C\,d\,f\,g\left(\left(\left(i\,c\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\;\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg)\Bigg/\Bigg(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)}\Bigg)-$$

$$\Bigg(i\,a d\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\ i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Big]\Bigg)\Bigg/\Bigg(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)}\Bigg)+$$

$$\frac{1}{(b c-a d)^3}a b^2 c C d^2 f g\Bigg(\Bigg(i\,c\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\ i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)}\Bigg)-\Bigg(i\,a d\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}$$

$$\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\Bigg/$$

$$\left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+\frac{1}{(b c-a d)^2}$$

$$b^2 c C d f g \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.$$

$$\left.\left.\left. i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Bigg/\left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.$$

$$\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Bigg/\left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\right.\right.$$

$$\left.\left.\left.\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\frac{1}{(b c-a d)^3} b^3 c^2 C d e h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)\right)+\frac{1}{(b c-a d)^3}$$

$$a b^2 c C d^2 e h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-$$

$$\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\right.\right.$$

$$\left.\left.\left.\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)+$$

$$\frac{1}{(b c-a d)^2} b^2 c C d e h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/$$

$$\left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\right.$$

$$\left.\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/$$

$$\left(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+\frac{1}{(b c-a d)^3}$$

$$b^3 c^3 C f h\left(\left(i c\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\ i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\left(i a d\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\ i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/\left(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\frac{1}{(b c-a d)^3}a b^2 c^2 C d f h\left(\left(i c\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h(c+d x)}}\right.\right.$$

$$\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right] \Bigg/$$

$$\left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\right.$$

$$\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right] \Bigg/$$

$$\left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\right.\right.\right.$$

$$\left.\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)-\frac{1}{(b c-a d)^2}$$

$$2 b^2 c^2 C f h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{ EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.$$

$$\left.\left.\left.i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.$$

$$\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\frac{1}{(b\,c-a\,d)^2}A\,b^2\,d^2\,f\,h\left(\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)}\right)-\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\,\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\right.\right.\right.$$

$$\left.\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)+\frac{1}{b c-a d}$$

$$b c C f h\left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.\right.$$

$$\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)-$$

$$\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\ i\ \text{ArcSinh}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/\left(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\right.\right.$$

$$\left.\left.\left.\left.\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)+\frac{1}{b c-a d}$$

$$a C d f h\left(\left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.\right.$$

$$\left.\left.i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\right.\right.\right.$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-$$

$$\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\right.\right.$$

$$\left.\left.\left.\left.\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)\right) \Bigg/$$

$$\left(\left(-b c C f h-a C d f h-\frac{b c C d^2 e g}{(c+d x)^2}+\frac{a C d^3 e g}{(c+d x)^2}+\frac{b c^2 C d f g}{(c+d x)^2}-\frac{a c C d^2 f g}{(c+d x)^2}+\right.\right.$$

$$\frac{b c^2 C d e h}{(c+d x)^2}-\frac{a c C d^2 e h}{(c+d x)^2}-\frac{b c^3 C f h}{(c+d x)^2}+$$

$$\frac{a c^2 C d f h}{(c+d x)^2}+\frac{b C d^2 e g}{c+d x}-\frac{b c C d f g}{c+d x}-$$

$$\left.\left.\frac{b c C d e h}{c+d x}+\frac{2 b c^2 C f h}{c+d x}+\frac{A b d^2 f h}{c+d x}\right)\right.$$

$$\left.\sqrt{e+\frac{(c+d x)\left(f-\frac{c f}{c+d x}\right)}{d}} \sqrt{g+\frac{(c+d x)\left(h-\frac{c h}{c+d x}\right)}{d}}\right)$$

Problem 30: Result unnecessarily involves complex numbers and more than twice size of optimal antiderivative.

$$\int \frac{A+C x^2}{(a+b x)^2 \sqrt{c+d x}\ \sqrt{e+f x}\ \sqrt{g+h x}}\, dx$$

Optimal (type 4, 738 leaves, 12 steps):

$$-\frac{\left(A b^2+a^2 C\right) \sqrt{c+d x} \sqrt{e+f x} \sqrt{g+h x}}{(b c-a d)(b e-a f)(b g-a h)(a+b x)}+\left(\left(A b+\frac{a^2 C}{b}\right) \sqrt{f} \sqrt{-d e+c f}\right.$$

$$\left.\sqrt{\frac{d(e+f x)}{d e-c f}} \sqrt{g+h x}\ \text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{f} \sqrt{c+d x}}{\sqrt{-d e+c f}}\right], \frac{(d e-c f) h}{f(d g-c h)}\right]\right) /$$

$$\left((b c-a d)(b e-a f)(b g-a h) \sqrt{e+f x} \sqrt{\frac{d(g+h x)}{d g-c h}}\right)+$$

$$\left(\sqrt{-d e+c f}\left(a^2 C d f-2 a b C(d e+c f)+b^2(2 c C e-A d f)\right) \sqrt{\frac{d(e+f x)}{d e-c f}}\right.$$

$$\left.\sqrt{\frac{d(g+h x)}{d g-c h}}\ \text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{f} \sqrt{c+d x}}{\sqrt{-d e+c f}}\right], \frac{(d e-c f) h}{f(d g-c h)}\right]\right) /$$

$$\left(b^2 d(b c-a d) \sqrt{f}(b e-a f) \sqrt{e+f x} \sqrt{g+h x}\right)-$$

$$\left(\sqrt{-d e+c f}\left(a^4 C d f h-A b^4(d e g+c f g+c e h)-2 a^3 b C(d f g+d e h+c f h)-2 a b^3\right.\right.$$

$$\left.\left.(2 c C e g-A d f g-A d e h-A c f h)-3 a^2 b^2(A d f h-C(d e g+c f g+c e h))\right) \sqrt{\frac{d(e+f x)}{d e-c f}}\right.$$

$$\left.\sqrt{\frac{d(g+h x)}{d g-c h}}\ \text{EllipticPi}\left[-\frac{b(d e-c f)}{(b c-a d) f}, \text{ArcSin}\left[\frac{\sqrt{f} \sqrt{c+d x}}{\sqrt{-d e+c f}}\right], \frac{(d e-c f) h}{f(d g-c h)}\right]\right) /$$

$$\left(b^2(b c-a d)^2 \sqrt{f}(b e-a f)(b g-a h) \sqrt{e+f x} \sqrt{g+h x}\right)$$

Result (type 4, 17743 leaves):

$$\frac{\left(-A b^2-a^2 C\right) \sqrt{c+d x} \sqrt{e+f x} \sqrt{g+h x}}{(b c-a d)(b e-a f)(b g-a h)(a+b x)}-$$

$$\frac{1}{d(-b c+a d)(-b e+a f)(-b g+a h)}\left(\frac{\left(A b^2+a^2 C\right)(c+d x)^{3/2}\left(f+\frac{d e}{c+d x}-\frac{c f}{c+d x}\right)\left(h+\frac{d g}{c+d x}-\frac{c h}{c+d x}\right)}{b \sqrt{e+\frac{(c+d x)\left(f-\frac{c f}{c+d x}\right)}{d}} \sqrt{g+\frac{(c+d x)\left(h-\frac{c h}{c+d x}\right)}{d}}}+\right.$$

$$\left((c+d x)\left(-b+\frac{b c}{c+d x}-\frac{a d}{c+d x}\right) \sqrt{f+\frac{d e}{c+d x}-\frac{c f}{c+d x}} \sqrt{h+\frac{d g}{c+d x}-\frac{c h}{c+d x}}\right.$$

$$\sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}$$

$$\left(-\left(\left((b c-a d)\left(2 b^2 C e g^2-2 a b C f g^2+A b^2 f g h+a^2 C f g h+A b^2 e h^2-a^2 C e h^2-\right.\right.\right.\right.$$

$$\left.\left.\left.\left.2 a A b f h^2\right)\right)\Big/\left(b (b g-a h)\sqrt{f+\frac{d e}{c+d x}-\frac{c f}{c+d x}}\sqrt{h+\frac{d g}{c+d x}-\frac{c h}{c+d x}}\right)\right)-\right.$$

$$\frac{\left(A b^2+a^2 C\right)(d e-c f)\sqrt{h+\frac{d g}{c+d x}-\frac{c h}{c+d x}}}{b\sqrt{f+\frac{d e}{c+d x}-\frac{c f}{c+d x}}}-\left(\left(-4 a b^3 c C e g-A b^4 d e g+3 a^2 b^2 C d e g-\right.\right.$$

$$A b^4 c f g+3 a^2 b^2 c C f g+2 a A b^3 d f g-2 a^3 b C d f g-A b^4 c e h+3 a^2 b^2 c C e h+$$
$$\left.2 a A b^3 d e h-2 a^3 b C d e h+2 a A b^3 c f h-2 a^3 b c C f h-3 a^2 A b^2 d f h+a^4 C d f h\right)$$

$$\left.\sqrt{h+\frac{d g}{c+d x}-\frac{c h}{c+d x}}\right)\Big/\left(b (b g-a h)\left(b-\frac{b c}{c+d x}+\frac{a d}{c+d x}\right)\sqrt{f+\frac{d e}{c+d x}-\frac{c f}{c+d x}}\right)$$

$$\left(\left(\left(i A b^2 d^2 e f g\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\left(\text{EllipticE}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\frac{(-d e+c f) h}{f(-d g+c h)}\right]-\text{EllipticF}\left[i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\right)\Big/\right.$$

$$\left((b c-a d)(-d e+c f)\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g+d e h-2 c f h}{c+d x}\right)\right)+\left(i a^2 C d^2 e f g\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\right.$$

$$\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(-d\,e+c\,f)\right.$$

$$\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}-$$

$$\left(i\,A\,b^2\,c\,d\,f^2\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]-\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\right)\Big/$$

$$\left((b\,c-a\,d)\,(-d\,e+c\,f)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}-\left(i\,a^2\,c\,C\,d\,f^2\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\right.\right.$$

$$\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\left(\text{EllipticE}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]-\right.$$

$$\left.\text{EllipticF}\left[i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(-d\,e+c\,f)\right.$$

$$\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\right)}-$$

$$\left(i A b^2 c d e f h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(-d e+c f) h}{f (-d g+c h)}\right]-\text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\right)\Big/$$

$$\left((b c-a d)\ (-d e+c f)\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\right.}\right.$$

$$\left.\left.\frac{d f g+d e h-2 c f h}{c+d x}\right)\right)-\left(i a^2 c C d e f h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\right.$$

$$\sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]-\right.$$

$$\left.\left.\text{EllipticF}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f (-d g+c h)}\right]\right)\right)\Big/\left((b c-a d)\ (-d e+c f)\right.$$

$$\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g-c d f g-c d e h+c^2 f h}{(c+d x)^2}+\frac{d f g+d e h-2 c f h}{c+d x}\right)}+$$

$$\left(i A b^2 c^2 f^2 h \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\left(\text{EllipticE}\left[i\ \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\right.\right.\right.$$

$$\frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big] - \text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\Big],\ \frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big]\Bigg)\Bigg)\Bigg/$$

$$\Bigg((bc-ad)\ (-de+cf)\sqrt{-\frac{-dg+ch}{h}}\ \sqrt{\left(fh+\frac{d^2eg-cdfg-cdeh+c^2fh}{(c+dx)^2}+\right.}$$

$$\left.\frac{dfg+deh-2cfh}{c+dx}\right)\Bigg)+\Bigg(i\,a^2c^2Cf^2h\sqrt{1-\frac{-de+cf}{f\,(c+dx)}}$$

$$\sqrt{1-\frac{-dg+ch}{h\,(c+dx)}}\Bigg(\text{EllipticE}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\Big],\ \frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big]-$$

$$\text{EllipticF}\Big[i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\Big],\ \frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big]\Bigg)\Bigg)\Bigg/\Bigg((bc-ad)\ (-de+cf)$$

$$\sqrt{-\frac{-dg+ch}{h}}\ \sqrt{\left(fh+\frac{d^2eg-cdfg-cdeh+c^2fh}{(c+dx)^2}+\frac{dfg+deh-2cfh}{c+dx}\right)}-$$

$$\Bigg(iAb^3d^2eg\sqrt{1-\frac{-de+cf}{f\,(c+dx)}}\ \sqrt{1-\frac{-dg+ch}{h\,(c+dx)}}\ \text{EllipticF}\Big[$$

$$i\,\text{ArcSinh}\Big[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\Big],\ \frac{(-de+cf)\,h}{f\,(-dg+ch)}\Big]\Bigg)\Bigg/\Bigg((bc-ad)^2\sqrt{-\frac{-dg+ch}{h}}$$

$$\sqrt{\left(fh+\frac{d^2eg-cdfg-cdeh+c^2fh}{(c+dx)^2}+\frac{dfg+deh-2cfh}{c+dx}\right)}-$$

$$\left(i\,a^2\,b\,C\,d^2\,e\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,b^2\,c\,C\,e\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,a\,b\,C\,d\,e\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,A\,b^3\,c\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,a^2\,b\,c\,C\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)^2\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,a\,b\,c\,C\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,A\,b^2\,d\,f\,g\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,A\,b^3\,c\,d\,e\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)^2\,\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(i\,a^2\,b\,c\,C\,d\,e\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)^2\,\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,a\,b\,c\,C\,e\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\Big/\left((b\,c-a\,d)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(2\,i\,A\,b^2\,d\,e\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\Big/\left((b\,c-a\,d)\,\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\,A\,b^3\,c^2\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticF}\left[\right.\right.$$

$$\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\Big/\left((b\,c-a\,d)^2\,\sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)-$$

$$\left(i\, a^2\, b\, c^2\, C\, f\, h\, \sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\, \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\, \text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right], \frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right) \Big/ \left((b\,c-a\,d)^2\, \sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,A\,b^2\,c\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\, \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\, \text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right], \frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right) \Big/ \left((b\,c-a\,d)\, \sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+$$

$$\left(2\,i\,a\,A\,b\,d\,f\,h\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\, \sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\, \text{EllipticF}\left[\right.\right.$$

$$\left.\left.i\, \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right], \frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right) \Big/ \left((b\,c-a\,d)\, \sqrt{-\frac{-d\,g+c\,h}{h}}\right.$$

$$\left.\sqrt{\left(f\,h+\frac{d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h+c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g+d\,e\,h-2\,c\,f\,h}{c+d\,x}\right)}\right)+\frac{1}{(b\,c-a\,d)^3}$$

$$A\,b^4\,d^2\,e\,g\left(\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-\right.$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\,i\,\text{ArcSinh}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\right.\right.$$

$$\left.\left.\left.\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)+\frac{1}{(b\,c-a\,d)^3}$$

$$a^2\,b^2\,C\,d^2\,e\,g\left(\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-\right.$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.$$

$$\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)+$$

$$\frac{1}{(b\,c-a\,d)^2}2\,b^3\,c\,C\,e\,g\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\right.\right.\right.$$

$$\left.\left.\left.\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left.\left.\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)-\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\right.$$

$$\left.\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\right.\right.$$

$$\left(\frac{c^2 f h}{(c+dx)^2}+\frac{d f g}{c+dx}+\frac{d e h}{c+dx}-\frac{2 c f h}{c+dx}\right)\Bigg)\Bigg)+\frac{1}{(bc-ad)^2}$$

$$2 a b^2 C d e g\left(\left(\left(i c\sqrt{1-\frac{-de+cf}{f(c+dx)}}\sqrt{1-\frac{-dg+ch}{h(c+dx)}}\,\text{EllipticPi}\left[\frac{(bc-ad)h}{b(-dg+ch)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\right],\frac{(-de+cf)h}{f(-dg+ch)}\right]\right)\Big/\left(\sqrt{-\frac{-dg+ch}{h}}\sqrt{\left(fh+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2 e g}{(c+dx)^2}-\frac{c d f g}{(c+dx)^2}-\frac{c d e h}{(c+dx)^2}+\frac{c^2 f h}{(c+dx)^2}+\frac{d f g}{c+dx}+\frac{d e h}{c+dx}-\frac{2 c f h}{c+dx}\right)\right)-\right.$$

$$\left(i a d\sqrt{1-\frac{-de+cf}{f(c+dx)}}\sqrt{1-\frac{-dg+ch}{h(c+dx)}}\,\text{EllipticPi}\left[\frac{(bc-ad)h}{b(-dg+ch)},\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\right],\frac{(-de+cf)h}{f(-dg+ch)}\right]\right)\Big/\left(b\sqrt{-\frac{-dg+ch}{h}}\sqrt{\left(fh+\right.\right.$$

$$\left.\left.\left.\frac{d^2 e g}{(c+dx)^2}-\frac{c d f g}{(c+dx)^2}-\frac{c d e h}{(c+dx)^2}+\frac{c^2 f h}{(c+dx)^2}+\frac{d f g}{c+dx}+\frac{d e h}{c+dx}-\frac{2 c f h}{c+dx}\right)\right)\right)-$$

$$\frac{1}{bc-ad}2 b^2 C e g\left(\left(\left(i c\sqrt{1-\frac{-de+cf}{f(c+dx)}}\sqrt{1-\frac{-dg+ch}{h(c+dx)}}\,\text{EllipticPi}\left[\frac{(bc-ad)h}{b(-dg+ch)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-dg+ch}{h}}}{\sqrt{c+dx}}\right],\frac{(-de+cf)h}{f(-dg+ch)}\right]\right)\Big/\left(\sqrt{-\frac{-dg+ch}{h}}\sqrt{\left(fh+\right.\right.\right.\right.$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-$$

$$\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg) \Big/ \Bigg(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)\Bigg)-$$

$$\frac{1}{(b c-a d)^3} A b^4 c d f g \Bigg(\Bigg(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[$$

$$\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big] \Big/$$

$$\Bigg(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+$$

$$\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)\Bigg)-\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}$$

$$\text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big], \frac{(-d e+c f) h}{f (-d g+c h)}\Big] \Big/\Bigg)$$

$$\left(b\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\frac{1}{(b c-a d)^3}$$

$$a^2 b^2 c C d f g\left(\left(i c\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\,\text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\right.\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\right.\right.\right.$$

$$\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\left(i a d\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\,\text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/\left(b\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\right.\right.$$

$$\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\frac{1}{(b c-a d)^2}2 a b^2 c C f g\left(\left(i c\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\,\text{EllipticPi}\right.\right.\left.\left.\right[\right.$$

$$\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\Bigg] \Bigg/$$

$$\left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\right.$$

$$\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\Bigg) \Bigg/$$

$$\left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\right.\right.\right.$$

$$\left.\left.\left.\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)\right)+\frac{1}{(b c-a d)^2}$$

$$2 A b^3 d f g \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)},\right.\right.\right.$$

$$\left.\left.\left.i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.$$

$$\left.\left.\left.\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\right.$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.$$

$$\left.\left. i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.$$

$$\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)+$$

$$\frac{1}{b\,c-a\,d}2\,a\,b\,C\,f\,g\left(\left(\left(i\,c\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.\right.\right.$$

$$\left.\left.\left.\left. i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)-$$

$$\left(i\,a\,d\,\sqrt{1-\frac{-d\,e+c\,f}{f\,(c+d\,x)}}\,\sqrt{1-\frac{-d\,g+c\,h}{h\,(c+d\,x)}}\,\text{EllipticPi}\left[\frac{(b\,c-a\,d)\,h}{b\,(-d\,g+c\,h)},\right.\right.$$

$$\left.\left. i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d\,g+c\,h}{h}}}{\sqrt{c+d\,x}}\right],\frac{(-d\,e+c\,f)\,h}{f\,(-d\,g+c\,h)}\right]\right)\Big/\left(b\,\sqrt{-\frac{-d\,g+c\,h}{h}}\,\sqrt{\left(f\,h+\right.\right.$$

$$\left.\left.\left.\frac{d^2\,e\,g}{(c+d\,x)^2}-\frac{c\,d\,f\,g}{(c+d\,x)^2}-\frac{c\,d\,e\,h}{(c+d\,x)^2}+\frac{c^2\,f\,h}{(c+d\,x)^2}+\frac{d\,f\,g}{c+d\,x}+\frac{d\,e\,h}{c+d\,x}-\frac{2\,c\,f\,h}{c+d\,x}\right)\right)\right)-$$

$$\frac{1}{(b c-a d)^3} A b^4 c d e h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)\right)-\frac{1}{(b c-a d)^3}$$

$$a^2 b^2 c C d e h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-$$

$$\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Big/\Bigg(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)\Bigg)-$$

$$\frac{1}{(b c-a d)^2} 2 a b^2 c C e h\Bigg(\Bigg(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[$$

$$\frac{(b c-a d) h}{b (-d g+c h)},\ i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Big/$$

$$\Bigg(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+$$

$$\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)\Bigg)-\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}$$

$$\text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},\ i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Big/$$

$$\left(b\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+\frac{1}{(b c-a d)^2}$$

$$2 A b^3 d e h\left(\left(i c\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\,\text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\right.\right.\right.$$

$$\left.\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/\left(\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\left(i a d\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\,\text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\right.\right.$$

$$\left.\left.i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\frac{(-d e+c f) h}{f(-d g+c h)}\right]\right)\Big/\left(b\sqrt{-\frac{-d g+c h}{h}}\sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+$$

$$\frac{1}{b c-a d}2 a b C e h\left(\left(i c\sqrt{1-\frac{-d e+c f}{f(c+d x)}}\sqrt{1-\frac{-d g+c h}{h(c+d x)}}\,\text{EllipticPi}\left[\frac{(b c-a d) h}{b(-d g+c h)},\right.\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\left(i\,a d\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\left[\frac{(b c-a d)\,h}{b\,(-d g+c h)},\right.\right.$$

$$i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/\left(b\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+$$

$$\frac{1}{(b c-a d)^3}A b^4 c^2 f h\left(\left(i\,c\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\ \text{EllipticPi}\left[\right.\right.\right.$$

$$\frac{(b c-a d)\,h}{b\,(-d g+c h)},\ i\,\text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right],\ \frac{(-d e+c f)\,h}{f\,(-d g+c h)}\Bigg]\Bigg/$$

$$\left(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\right.\right.$$

$$\left.\left.\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\right)-\left(i\,a d\sqrt{1-\frac{-d e+c f}{f\,(c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h\,(c+d x)}}\right.$$

$$\text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\Bigg) \Bigg/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)+\frac{1}{(b c-a d)^3}$$

$$a^2 b^2 c^2 C f h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Bigg/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-$$

$$\frac{1}{(b c-a d)^2} 2 A b^3 c f h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)-\left(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(b \sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)}\right)\right)-\frac{1}{(b c-a d)^2}$$

$$2 a A b^2 d f h \left(\left(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}} \text{EllipticPi}\left[\frac{(b c-a d) h}{b (-d g+c h)}, i \text{ArcSinh}\left[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\right], \frac{(-d e+c f) h}{f (-d g+c h)}\right]\right) \Big/ \left(\sqrt{-\frac{-d g+c h}{h}} \sqrt{\left(f h+\right.\right.\right.$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-$$

$$\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg) \Big/ \Bigg(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Big(f h+$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)\Bigg)+$$

$$\frac{1}{b c-a d} A b^2 f h \Bigg(\Bigg(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg) \Big/ \Bigg(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Big(f h+$$

$$\left(\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\right)\Bigg)-$$

$$\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}} \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\ \frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg) \Big/ \Bigg(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Big(f h+$$

$$\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)\Bigg)\Bigg)-$$

$$\frac{1}{b c-a d} a^2 C f h\Bigg(\Bigg(\Bigg(i c \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)},$$

$$i\ \text{ArcSinh}\Big[\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Big/\Bigg(\sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+$$

$$\frac{d^2 e g}{(c+d x)^2}-\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)\Bigg)-$$

$$\Bigg(i a d \sqrt{1-\frac{-d e+c f}{f (c+d x)}}\ \sqrt{1-\frac{-d g+c h}{h (c+d x)}}\ \text{EllipticPi}\Big[\frac{(b c-a d) h}{b (-d g+c h)}, i\ \text{ArcSinh}\Big[$$

$$\frac{\sqrt{-\frac{-d g+c h}{h}}}{\sqrt{c+d x}}\Big],\frac{(-d e+c f) h}{f (-d g+c h)}\Big]\Bigg)\Big/\Bigg(b \sqrt{-\frac{-d g+c h}{h}}\ \sqrt{\Bigg(f h+\frac{d^2 e g}{(c+d x)^2}-$$

$$\frac{c d f g}{(c+d x)^2}-\frac{c d e h}{(c+d x)^2}+\frac{c^2 f h}{(c+d x)^2}+\frac{d f g}{c+d x}+\frac{d e h}{c+d x}-\frac{2 c f h}{c+d x}\Bigg)\Bigg)\Bigg)\Bigg)\Bigg)\Big/$$

$$\Bigg(\Bigg(-2 b^2 C e g+2 a b C f g+2 a b C e h+A b^2 f h-a^2 C f h+\frac{A b^2 d^2 e g}{(c+d x)^2}+\frac{a^2 C d^2 e g}{(c+d x)^2}-$$

$$\frac{A b^2 c d f g}{(c+d x)^2}-\frac{a^2 c C d f g}{(c+d x)^2}-$$

$$\frac{A b^2 c d e h}{(c+d x)^2}-\frac{a^2 c C d e h}{(c+d x)^2}+$$

$$\frac{A\,b^2\,c^2\,f\,h}{(c+d\,x)^2}+\frac{a^2\,c^2\,C\,f\,h}{(c+d\,x)^2}+\frac{2\,b^2\,c\,C\,e\,g}{c+d\,x}+\frac{2\,a\,b\,C\,d\,e\,g}{c+d\,x}-\frac{2\,a\,b\,c\,C\,f\,g}{c+d\,x}+\frac{2\,A\,b^2\,d\,f\,g}{c+d\,x}-\frac{2\,a\,b\,c\,C\,e\,h}{c+d\,x}+\frac{2\,A\,b^2\,d\,e\,h}{c+d\,x}-\frac{2\,A\,b^2\,c\,f\,h}{c+d\,x}-\frac{2\,a\,A\,b\,d\,f\,h}{c+d\,x}\Bigg)\sqrt{e+\frac{(c+d\,x)\left(f-\frac{c\,f}{c+d\,x}\right)}{d}}\sqrt{g+\frac{(c+d\,x)\left(h-\frac{c\,h}{c+d\,x}\right)}{d}}\Bigg)$$

Problem 31: Result more than twice size of optimal antiderivative.

$$\int\frac{(a+b\,x)^{3/2}\,(A+C\,x^2)}{\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 1395 leaves, 10 steps):

$$\left(\left(C\left(3adfh-5b\left(dfg+deh+cfh\right)\right)\left(adfh-3b\left(dfg+deh+cfh\right)\right)+8bdfh\left(3Abdfh-C\left(2b\left(deg+cfg+ceh\right)+a\left(dfg+deh+cfh\right)\right)\right)\right)\sqrt{a+bx}\,\sqrt{e+fx}\,\sqrt{g+hx}\right)\Big/\left(24bd^2f^3h^3\sqrt{c+dx}\right)+\frac{1}{12d^2f^2h^2}C\left(3adfh-5b\left(dfg+deh+cfh\right)\right)\sqrt{a+bx}\,\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}+\frac{C\left(a+bx\right)^{3/2}\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{3dfh}-$$

$$\left(\sqrt{dg-ch}\,\sqrt{fg-eh}\left(C\left(3adfh-5b\left(dfg+deh+cfh\right)\right)\left(adfh-3b\left(dfg+deh+cfh\right)\right)+8bdfh\left(3Abdfh-C\left(2b\left(deg+cfg+ceh\right)+a\left(dfg+deh+cfh\right)\right)\right)\right)\sqrt{a+bx}\,\sqrt{-\frac{\left(de-cf\right)\left(g+hx\right)}{\left(fg-eh\right)\left(c+dx\right)}}\,\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{dg-ch}\,\sqrt{e+fx}}{\sqrt{fg-eh}\,\sqrt{c+dx}}\right],\frac{\left(bc-ad\right)\left(fg-eh\right)}{\left(be-af\right)\left(dg-ch\right)}\right]\right)\Big/\left(24bd^3f^3h^3\sqrt{\frac{\left(de-cf\right)\left(a+bx\right)}{\left(be-af\right)\left(c+dx\right)}}\,\sqrt{g+hx}\right)+$$

$$\left(\left(be-af\right)\sqrt{bg-ah}\left(3a^2Cd^2f^2h^2+6abCdfh\left(cfh+2d\left(fg+eh\right)\right)-b^2\left(24Ad^2f^2h^2+C\left(5c^2f^2h^2+4cdfh\left(fg+eh\right)+d^2\left(15f^2g^2+14efgh+15e^2h^2\right)\right)\right)\right)\sqrt{\frac{\left(be-af\right)\left(c+dx\right)}{\left(de-cf\right)\left(a+bx\right)}}\,\sqrt{g+hx}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{bg-ah}\,\sqrt{e+fx}}{\sqrt{fg-eh}\,\sqrt{a+bx}}\right],-\frac{\left(bc-ad\right)\left(fg-eh\right)}{\left(de-cf\right)\left(bg-ah\right)}\right]\right)\Big/\left(24b^2d^2f^3h^3\sqrt{fg-eh}\,\sqrt{c+dx}\,\sqrt{-\frac{\left(be-af\right)\left(g+hx\right)}{\left(fg-eh\right)\left(a+bx\right)}}\right)-\frac{1}{24b^2d^3\sqrt{bc-ad}\,f^3h^4\sqrt{c+dx}\,\sqrt{e+fx}}\sqrt{-dg+ch}\left(4bdfh\left(C\left(b\left(deg+cfg+ceh\right)+a\left(dfg+deh+cfh\right)\right)\left(3adfh-5b\left(dfg+deh+cfh\right)\right)+2dfh\left(3b^2cCeg+2a^2C\left(dfg+deh+cfh\right)-ab\left(12Adfh-5C\left(deg+cfg+ceh\right)\right)\right)\right)+\left(adfh+b\left(dfg+deh+cfh\right)\right)\left(C\left(3adfh-5b\left(dfg+deh+cfh\right)\right)\left(adfh-3b\left(dfg+deh+cfh\right)\right)+8bdfh\left(3Abdfh-C\left(2b\left(deg+cfg+ceh\right)+a\left(dfg+deh+cfh\right)\right)\right)\right)\right)\left(a+bx\right)\sqrt{\frac{\left(bg-ah\right)\left(c+dx\right)}{\left(dg-ch\right)\left(a+bx\right)}}\,\sqrt{\frac{\left(bg-ah\right)\left(e+fx\right)}{\left(fg-eh\right)\left(a+bx\right)}}\,\text{EllipticPi}\left[-\frac{b\left(dg-ch\right)}{\left(bc-ad\right)h},\text{ArcSin}\left[\frac{\sqrt{bc-ad}\,\sqrt{g+hx}}{\sqrt{-dg+ch}\,\sqrt{a+bx}}\right],\frac{\left(be-af\right)\left(dg-ch\right)}{\left(bc-ad\right)\left(fg-eh\right)}\right]$$

Result (type 4, 38 310 leaves) : Display of huge result suppressed!

Problem 32: Result more than twice size of optimal antiderivative.

$$\int \frac{\sqrt{a+b\,x}\,\left(A+C\,x^2\right)}{\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,dx$$

Optimal (type 4, 937 leaves, 9 steps):

$$\frac{C\left(a\,d\,f\,h-3\,b\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\sqrt{a+b\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{4\,b\,d\,f^2\,h^2\,\sqrt{c+d\,x}}+$$

$$\frac{C\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{2\,d\,f\,h}-$$

$$\left(C\sqrt{d\,g-c\,h}\,\sqrt{f\,g-e\,h}\,\left(a\,d\,f\,h-3\,b\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\sqrt{a+b\,x}\,\sqrt{-\frac{\left(d\,e-c\,f\right)\left(g+h\,x\right)}{\left(f\,g-e\,h\right)\left(c+d\,x\right)}}\right.$$

$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d\,g-c\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}}\right],\frac{\left(b\,c-a\,d\right)\left(f\,g-e\,h\right)}{\left(b\,e-a\,f\right)\left(d\,g-c\,h\right)}\right]\right)\Big/$$

$$\left(4\,b\,d^2\,f^2\,h^2\sqrt{\frac{\left(d\,e-c\,f\right)\left(a+b\,x\right)}{\left(b\,e-a\,f\right)\left(c+d\,x\right)}}\,\sqrt{g+h\,x}\right)+$$

$$\left(C\left(b\,e-a\,f\right)\sqrt{b\,g-a\,h}\,\left(a\,d\,f\,h+b\left(c\,f\,h+3\,d\left(f\,g+e\,h\right)\right)\right)\sqrt{\frac{\left(b\,e-a\,f\right)\left(c+d\,x\right)}{\left(d\,e-c\,f\right)\left(a+b\,x\right)}}\right.$$

$$\left.\sqrt{g+h\,x}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],-\frac{\left(b\,c-a\,d\right)\left(f\,g-e\,h\right)}{\left(d\,e-c\,f\right)\left(b\,g-a\,h\right)}\right]\right)\Big/$$

$$\left(4\,b^2\,d\,f^2\,h^2\,\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{\left(b\,e-a\,f\right)\left(g+h\,x\right)}{\left(f\,g-e\,h\right)\left(a+b\,x\right)}}\right)-$$

$$\left(\sqrt{-d\,g+c\,h}\,\left(C\left(a\,d\,f\,h-3\,b\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\left(a\,d\,f\,h+b\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)-\right.\right.$$

$$\left.\left.4\,b\,d\,f\,h\left(2\,A\,b\,d\,f\,h-C\left(b\left(d\,e\,g+c\,f\,g+c\,e\,h\right)+a\left(d\,f\,g+d\,e\,h+c\,f\,h\right)\right)\right)\right)$$

$$\left(a+b\,x\right)\sqrt{\frac{\left(b\,g-a\,h\right)\left(c+d\,x\right)}{\left(d\,g-c\,h\right)\left(a+b\,x\right)}}\,\sqrt{\frac{\left(b\,g-a\,h\right)\left(e+f\,x\right)}{\left(f\,g-e\,h\right)\left(a+b\,x\right)}}$$

$$\left.\text{EllipticPi}\left[-\frac{b\left(d\,g-c\,h\right)}{\left(b\,c-a\,d\right)h},\text{ArcSin}\left[\frac{\sqrt{b\,c-a\,d}\,\sqrt{g+h\,x}}{\sqrt{-d\,g+c\,h}\,\sqrt{a+b\,x}}\right],\frac{\left(b\,e-a\,f\right)\left(d\,g-c\,h\right)}{\left(b\,c-a\,d\right)\left(f\,g-e\,h\right)}\right]\right)\Big/$$

$$\left(4\,b^2\,d^2\,\sqrt{b\,c-a\,d}\,f^2\,h^3\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\right)$$

Result (type 4, 16 659 leaves):

$$\frac{C\sqrt{a+bx}\ \sqrt{c+dx}\ \sqrt{e+fx}\ \sqrt{g+hx}}{2dfh}+$$

$$\frac{1}{2b^3dfh}\left(\left(C\left(-3bdfg-3bdeh-3bcfh+adfh\right)\left(a+bx\right)^{5/2}\right.\right.$$

$$\left.\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)\Big/$$

$$\left(2dfh\sqrt{c+\frac{\left(a+bx\right)\left(d-\frac{ad}{a+bx}\right)}{b}}\ \sqrt{e+\frac{\left(a+bx\right)\left(f-\frac{af}{a+bx}\right)}{b}}\ \sqrt{g+\frac{\left(a+bx\right)\left(h-\frac{ah}{a+bx}\right)}{b}}\right)+$$

$$\left(1\Big/\left(2dfh\sqrt{c+\frac{\left(a+bx\right)\left(d-\frac{ad}{a+bx}\right)}{b}}\ \sqrt{e+\frac{\left(a+bx\right)\left(f-\frac{af}{a+bx}\right)}{b}}\ \sqrt{g+\frac{\left(a+bx\right)\left(h-\frac{ah}{a+bx}\right)}{b}}\right)\right)$$

$$\left(a+bx\right)^{3/2}\sqrt{\left(\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)}$$

$$\left(\left(\left(3b^4cCdefg^2\sqrt{\frac{\left(bc-ad\right)\left(bg-ah\right)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.\right.\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left(\left(bdg-bch\right)\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(be-af\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b\left(-fg+eh\right)}}\ \right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{\left(-bc+ad\right)\left(-fg+eh\right)}{\left(-be+af\right)\left(-dg+ch\right)}\right]\right)\Big/\left(\left(bc-ad\right)\left(bg-ah\right)\right)\right)-\frac{1}{-bc+ad}$$

$$\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(be-af\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b\left(-fg+eh\right)}}\ \right],\ \frac{\left(-bc+ad\right)\left(-fg+eh\right)}{\left(-be+af\right)\left(-dg+ch\right)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\ \sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-\left(3ab^3Cd^2ef\right.$$

$$g^2 \sqrt{\frac{(bc-ad)\,(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)\,(-fg+eh)}{(-be+af)\,(-dg+ch)}\right]\right)\Big/\left((bc-ad)\,(bg-ah)\right)\right)-\frac{1}{-bc+ad}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)\,(-fg+eh)}{(-be+af)\,(-dg+ch)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}-\right.$$

$$\left(3ab^3cCdf^2g^2\sqrt{\frac{(bc-ad)\,(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)\,(-fg+eh)}{(-be+af)\,(-dg+ch)}\right]\right)\Big/\left((bc-ad)\,(bg-ah)\right)\right)-\frac{1}{-bc+ad}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)\,(-fg+eh)}{(-be+af)\,(-dg+ch)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}+\right.$$

$$\left(3\,a^2\,b^2\,C\,d^2\,f^2\,g^2\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}\right.\right.\right.\right.$$

$$\left.\left.\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\right)\Big/\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(3\,b^4\,c\,C\,d\,e^2\,g\,h\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}\right.\right.\right.\right.$$

$$\left.\left.\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(3ab^3Cd^2e^2gh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}$$

$$\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(3b^4c^2Cefgh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(10ab^3cCdefgh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/((bc-ad)(bg-ah))\right)-\frac{1}{-bc+ad}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(7a^2b^2Cd^2efgh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}]\Big)\Big/\Big((b\,c-a\,d)\,(b\,g-a\,h)\Big)\Big)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\Big],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Big)\Big)\Big/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\Bigg)-$$

$$\Bigg(3\,a\,b^3\,c^2\,C\,f^2\,g\,h\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}$$

$$\Bigg(-\Bigg(\Bigg((b\,d\,g-b\,c\,h)\,\text{EllipticE}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\Big],$$

$$\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}]\Big)\Big/\Big((b\,c-a\,d)\,(b\,g-a\,h)\Big)\Big)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b\,e-a\,f)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\,\Big],\,\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Big)\Big)\Big/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\Bigg)+$$

$$\Bigg(7\,a^2\,b^2\,c\,C\,d\,f^2\,g\,h\,\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}$$

$$\left(-\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\,\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(4\,a^3\,b\,C\,d^2\,f^2\,g\,h\,\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left.\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\,\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\right.$$

$$\left(-\left(\left(\left(b\,d\,g-b\,c\,h\right)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Big/\left(\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(b\,e-a\,f\right)\,\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\,\frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\,\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(3\,a\,b^3\,c\,C\,d\,e^2\,h^2\,\sqrt{\frac{\left(b\,c-a\,d\right)\,\left(b\,g-a\,h\right)\,\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/((bc-ad)(bg-ah))\right)-\frac{1}{-bc+ad}$$

$$\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(3a^2b^2Cd^2e^2h^2\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/((bc-ad)(bg-ah))\right)-\frac{1}{-bc+ad}$$

$$\left.\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(3\,a\,b^3\,c^2\,C\,e\,f\,h^2\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}$$

$$\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(7\,a^2\,b^2\,c\,C\,d\,e\,f\,h^2\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\right.$$

$$\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}$$

$$\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}$$

$$\left.d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(4 a^3 b C d^2 e f h^2 \sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\right.$$

$$\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}$$

$$\left(-\left(\left(\left((b d g-b c h)\ \text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/((b c-a d)(b g-a h))\right)-\frac{1}{-b c+a d}$$

$$\left.\left.d\ \text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\ \frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(3 a^2 b^2 c^2 C f^2 h^2 \sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\right.$$

$$\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}$$

$$\left(-\left(\left(\left((b d g-b c h)\ \text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/((b c-a d)(b g-a h))\right)-\frac{1}{-b c+a d}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}-\right.$$

$$\left(4a^3bcCdf^2h^2\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/((bc-ad)(bg-ah))\right)-\frac{1}{-bc+ad}$$

$$d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}+\right.$$

$$\left(a^4Cd^2f^2h^2\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.$$

$$\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}$$

$$\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.\right.$$

$$\frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}]\Big)\Big/\ ((b c-a d)\ (b g-a h))\Big) - \frac{1}{-b c+a d}$$

$$d\ \text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\ \left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ ],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}]\Big)\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2 b^3 c C d e f g h\ \sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\ \sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-b e+a f)\ \left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ ],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}]\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(2 a b^2 C d^2 e f g h\ \sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\ \sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-b e+a f)\ \left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ ],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}]\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(2 a b^2 c C d f^2 g h\ \sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\ \sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-b e+a f)\ \left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ ],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}]\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2a^2bCd^2f^2gh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(2ab^2cCdefh^2\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2a^2bCd^2efh^2\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2a^2bcCdf^2h^2\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right)$$

$$\left(\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(2 a^3 C d^2 f^2 h^2\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\left(\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2 b^2 C d^2 e f g\left(-b g+a h\right)\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)}{\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)^2}}\,\text{EllipticPi}\left[-\frac{-b f g+b e h}{\left(-b e+a f\right) h},\right.$$

$$\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right/$$

$$\left(\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2 b^2 c C d f^2 g\left(-b g+a h\right)\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)}{\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)^2}}\,\text{EllipticPi}\left[-\frac{-b f g+b e h}{\left(-b e+a f\right) h},\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\,,\ \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg/$$

$$\left(\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(2 a b C d^2 f^2 g\left(-b g+a h\right)\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\right.$$

$$\left.\sqrt{-\frac{\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)}{\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b f g+b e h}{\left(-b e+a f\right) h}\right.\right.,$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\,,\ \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right)\Bigg/$$

$$\left(\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(3 b^2 C d^2 f^2 g^2\left(-b g+a h\right)\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\right.$$

$$\left.\sqrt{-\frac{\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)}{\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b f g+b e h}{\left(-b e+a f\right) h}\right.\right.,$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\,,\ \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\right)\Bigg/$$

$$\left(h\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(3 b^2 C d^2 e^2 h\left(-b g+a h\right)\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)}{\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)^2}}\ \text{EllipticPi}\left[-\frac{-bfg+beh}{(-be+af)h},\right.$$

$$\left.\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg/$$

$$\left(\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2b^2cCdefh(-bg+ah)\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)}{\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)^2}}\ \text{EllipticPi}\left[-\frac{-bfg+beh}{(-be+af)h},\right.$$

$$\left.\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg/$$

$$\left(\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(2abCd^2efh(-bg+ah)\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)}{\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)^2}}\ \text{EllipticPi}\left[-\frac{-bfg+beh}{(-be+af)h},\right.$$

$$\left.\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg/$$

$$\left(\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(3\,b^2\,c^2\,C\,f^2\,h\,\left(-b\,g+a\,h\right)\,\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)}{\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b\,f\,g+b\,e\,h}{\left(-b\,e+a\,f\right)\,h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\,\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\ \frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(2\,a\,b\,c\,C\,d\,f^2\,h\,\left(-b\,g+a\,h\right)\,\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)}{\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b\,f\,g+b\,e\,h}{\left(-b\,e+a\,f\right)\,h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\,\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\ \frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\,\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\,\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)+$$

$$\left(8\,A\,b^2\,d^2\,f^2\,h\,\left(-b\,g+a\,h\right)\,\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\,\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)}{\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b\,f\,g+b\,e\,h}{\left(-b\,e+a\,f\right)\,h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b\,e+a\,f\right)\,\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,\left(-f\,g+e\,h\right)}}\right],\ \frac{\left(-b\,c+a\,d\right)\,\left(-f\,g+e\,h\right)}{\left(-b\,e+a\,f\right)\,\left(-d\,g+c\,h\right)}\right]\right)\Big/$$

$$\left(\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(a^2\,C\,d^2\,f^2\,h\,(-b\,g+a\,h)\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)}{\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b\,f\,g+b\,e\,h}{(-b\,e+a\,f)\,h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{(-b\,e+a\,f)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left.\left(\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)\right)$$

Problem 33: Result more than twice size of optimal antiderivative.

$$\int\frac{A+C\,x^2}{\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 757 leaves, 8 steps) :

$$\frac{C\sqrt{a+bx}\ \sqrt{e+fx}\ \sqrt{g+hx}}{bfh\sqrt{c+dx}} -$$

$$\left(C\sqrt{dg-ch}\ \sqrt{fg-eh}\ \sqrt{a+bx}\ \sqrt{-\frac{(de-cf)\ (g+hx)}{(fg-eh)\ (c+dx)}}\ \text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{dg-ch}\ \sqrt{e+fx}}{\sqrt{fg-eh}\ \sqrt{c+dx}}\right],\ \frac{(bc-ad)\ (fg-eh)}{(be-af)\ (dg-ch)}\right]\right)\Big/\left(bdfh\sqrt{\frac{(de-cf)\ (a+bx)}{(be-af)\ (c+dx)}}\ \sqrt{g+hx}\right)+$$

$$\left(\left(a^2CfH+abC\ (fg+eh)-b^2\ (Ceg-2Afh)\right)\sqrt{\frac{(be-af)\ (c+dx)}{(de-cf)\ (a+bx)}}\ \sqrt{g+hx}\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{bg-ah}\ \sqrt{e+fx}}{\sqrt{fg-eh}\ \sqrt{a+bx}}\right],\ -\frac{(bc-ad)\ (fg-eh)}{(de-cf)\ (bg-ah)}\right]\right)\Big/$$

$$\left(b^2fh\sqrt{bg-ah}\ \sqrt{fg-eh}\ \sqrt{c+dx}\ \sqrt{-\frac{(be-af)\ (g+hx)}{(fg-eh)\ (a+bx)}}\right)-$$

$$\left(C\sqrt{-dg+ch}\ (adfh+b\ (dfg+deh+cfh))\ (a+bx)\sqrt{\frac{(bg-ah)\ (c+dx)}{(dg-ch)\ (a+bx)}}\right.$$

$$\sqrt{\frac{(bg-ah)\ (e+fx)}{(fg-eh)\ (a+bx)}}\ \text{EllipticPi}\left[-\frac{b\ (dg-ch)}{(bc-ad)\ h},\ \text{ArcSin}\left[\frac{\sqrt{bc-ad}\ \sqrt{g+hx}}{\sqrt{-dg+ch}\ \sqrt{a+bx}}\right],\right.$$

$$\left.\left.\frac{(be-af)\ (dg-ch)}{(bc-ad)\ (fg-eh)}\right]\right)\Big/\left(b^2d\sqrt{bc-ad}\ fh^2\sqrt{c+dx}\ \sqrt{e+fx}\right)$$

Result (type 4, 6207 leaves) :

$$-\frac{1}{b^3}2\left(-\left(\left(C\ (a+bx)^{5/2}\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)\Big/\right.\right.$$

$$\left.\left.\left(2dfh\sqrt{c+\frac{(a+bx)\ \left(d-\frac{ad}{a+bx}\right)}{b}}\ \sqrt{e+\frac{(a+bx)\ \left(f-\frac{af}{a+bx}\right)}{b}}\ \sqrt{g+\frac{(a+bx)\ \left(h-\frac{ah}{a+bx}\right)}{b}}\right)\right)+$$

$$\left(1\Big/\left(2dfh\sqrt{c+\frac{(a+bx)\ \left(d-\frac{ad}{a+bx}\right)}{b}}\ \sqrt{e+\frac{(a+bx)\ \left(f-\frac{af}{a+bx}\right)}{b}}\ \sqrt{g+\frac{(a+bx)\ \left(h-\frac{ah}{a+bx}\right)}{b}}\right)\right)$$

$$(a+bx)^{3/2}\sqrt{\left(\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)}$$

$$\left(\left(b^3\,c\,C\,e\,g\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-\left(a\,b^2\,C\,d\,e\,g\sqrt{\frac{(b\,c-a\,d)\,(b\,g-a\,h)\left(-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}\right)}{b\,d\,g-b\,c\,h}}\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\left(-\left(\left(\left((b\,d\,g-b\,c\,h)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/\left((b\,c-a\,d)\,(b\,g-a\,h)\right)\right)-\frac{1}{-b\,c+a\,d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(b\,e-a\,f)\left(h+\frac{b\,g}{a+b\,x}-\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(a b^2 c C f g\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(a^2 b C d f g\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(ab^2cCeh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Big[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(a^2bCdeh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Big[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\left((b c-a d)\ (b g-a h)\right)\right)\Bigg)\Bigg(-\frac{1}{-b c+a d} d\ \text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\ \left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ \Big],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\ \left(f+\frac{b e-a f}{a+b x}\right)\ \left(h+\frac{b g-a h}{a+b x}\right)}\Bigg)+$$

$$\Bigg(a^2 b c C f h\sqrt{\frac{(b c-a d)\ (b g-a h)\ \left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\ \left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\ \Bigg(-\Bigg(\Bigg(\Bigg((b d g-b c h)\ \text{EllipticE}\Big[$$

$$\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\ \left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ \Big],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\left((b c-a d)\ (b g-a h)\right)\right)\Bigg)\Bigg(-\frac{1}{-b c+a d} d\ \text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\ \left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ \Big],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\Bigg(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\ \left(f+\frac{b e-a f}{a+b x}\right)\ \left(h+\frac{b g-a h}{a+b x}\right)}\Bigg)-$$

$$\Bigg(a^3 C d f h\sqrt{\frac{(b c-a d)\ (b g-a h)\ \left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\ \left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\ \Bigg(-\Bigg(\Bigg(\Bigg((b d g-b c h)\ \text{EllipticE}\Big[$$

$$\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\,\right],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg/$$

$$\left((bc-ad)(bg-ah)\right)\Bigg) - \frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\,\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2Ab^2dfh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\,\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2a^2Cdfh\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\,\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(bCde(-bg+ah)\left(-\frac{f}{-be+af}+\frac{h}{-bg+ah}\right)\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)}{\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b f g+b e h}{\left(-b e+a f\right) h},\right.$$

$$\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\ \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg/$$

$$\left(\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(b c C f\left(-b g+a h\right)\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)}{\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b f g+b e h}{\left(-b e+a f\right) h},\right.$$

$$\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\ \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg/$$

$$\left(\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(a C d f\left(-b g+a h\right)\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)}{\left(-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b f g+b e h}{\left(-b e+a f\right) h},\right.$$

$$\left.\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\ \frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg/$$

$$\left(\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(b\,C\,d\,f\,g\,(-b\,g+a\,h)\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)}{\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)^2}}\ \text{EllipticPi}\left[-\frac{-b\,f\,g+b\,e\,h}{(-b\,e+a\,f)\,h},\right.$$

$$\left.\left.\text{ArcSin}\left[\sqrt{\frac{(-b\,e+a\,f)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\right/$$

$$\left.\left(h\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)\right)$$

Problem 34: Result more than twice size of optimal antiderivative.

$$\int\frac{A+C\,x^2}{(a+b\,x)^{3/2}\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 867 leaves, 9 steps):

$$\frac{2\left(Ab^2+a^2C\right)d\sqrt{a+bx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{b\left(bc-ad\right)\left(be-af\right)\left(bg-ah\right)\sqrt{c+dx}}-\frac{2\left(Ab^2+a^2C\right)\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{\left(bc-ad\right)\left(be-af\right)\left(bg-ah\right)\sqrt{a+bx}}-$$

$$\left(2\left(Ab^2+a^2C\right)\sqrt{dg-ch}\,\sqrt{fg-eh}\,\sqrt{a+bx}\,\sqrt{-\frac{\left(de-cf\right)\left(g+hx\right)}{\left(fg-eh\right)\left(c+dx\right)}}\right.$$

$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{dg-ch}\,\sqrt{e+fx}}{\sqrt{fg-eh}\,\sqrt{c+dx}}\right],\frac{\left(bc-ad\right)\left(fg-eh\right)}{\left(be-af\right)\left(dg-ch\right)}\right]\right)\Big/$$

$$\left(b\left(bc-ad\right)\left(be-af\right)\left(bg-ah\right)\sqrt{\frac{\left(de-cf\right)\left(a+bx\right)}{\left(be-af\right)\left(c+dx\right)}}\,\sqrt{g+hx}\right)-$$

$$\left(2\left(2abcC+Ab^2d-a^2Cd\right)\sqrt{\frac{\left(be-af\right)\left(c+dx\right)}{\left(de-cf\right)\left(a+bx\right)}}\,\sqrt{g+hx}\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{bg-ah}\,\sqrt{e+fx}}{\sqrt{fg-eh}\,\sqrt{a+bx}}\right],-\frac{\left(bc-ad\right)\left(fg-eh\right)}{\left(de-cf\right)\left(bg-ah\right)}\right]\right)\Big/$$

$$\left(b^2\left(bc-ad\right)\sqrt{bg-ah}\,\sqrt{fg-eh}\,\sqrt{c+dx}\,\sqrt{-\frac{\left(be-af\right)\left(g+hx\right)}{\left(fg-eh\right)\left(a+bx\right)}}\right)+$$

$$\left(2C\sqrt{-dg+ch}\,\left(a+bx\right)\sqrt{\frac{\left(bg-ah\right)\left(c+dx\right)}{\left(dg-ch\right)\left(a+bx\right)}}\,\sqrt{\frac{\left(bg-ah\right)\left(e+fx\right)}{\left(fg-eh\right)\left(a+bx\right)}}\,\text{EllipticPi}\left[-\frac{b\left(dg-ch\right)}{\left(bc-ad\right)h},\right.\right.$$

$$\left.\left.\text{ArcSin}\left[\frac{\sqrt{bc-ad}\,\sqrt{g+hx}}{\sqrt{-dg+ch}\,\sqrt{a+bx}}\right],\frac{\left(be-af\right)\left(dg-ch\right)}{\left(bc-ad\right)\left(fg-eh\right)}\right]\right)\Big/\left(b^2\sqrt{bc-ad}\,h\sqrt{c+dx}\,\sqrt{e+fx}\right)$$

Result (type 4, 2103 leaves):

$$-\frac{2\left(Ab^2+a^2C\right)\sqrt{c+dx}\,\sqrt{e+fx}\,\sqrt{g+hx}}{\left(bc-ad\right)\left(be-af\right)\left(bg-ah\right)\sqrt{a+bx}}+\frac{1}{b^3\left(-bc+ad\right)\left(-be+af\right)\left(-bg+ah\right)}$$

$$2\left(\left(\left(-Ab^2-a^2C\right)\left(a+bx\right)^{5/2}\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)\Big/\right.$$

$$\left.\left(\sqrt{c+\frac{\left(a+bx\right)\left(d-\frac{ad}{a+bx}\right)}{b}}\,\sqrt{e+\frac{\left(a+bx\right)\left(f-\frac{af}{a+bx}\right)}{b}}\,\sqrt{g+\frac{\left(a+bx\right)\left(h-\frac{ah}{a+bx}\right)}{b}}\right)+\right.$$

$$\frac{1}{\sqrt{c+\frac{(a+bx)\left(d-\frac{ad}{a+bx}\right)}{b}}\sqrt{e+\frac{(a+bx)\left(f-\frac{af}{a+bx}\right)}{b}}\sqrt{g+\frac{(a+bx)\left(h-\frac{ah}{a+bx}\right)}{b}}}(bc-ad)(be-af)$$

$$(bg-ah)(a+bx)^{3/2}\sqrt{\left(\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)}$$

$$\left(\left(Ab^2\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\right.\right.$$

$$\left(-\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-$$

$$\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.$$

$$\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(a^2C\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\right.$$

$$\left(-\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.\right.\right.$$

$$\left.\left.\left.\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-$$

$$\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\right.$$

$$\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\Big]\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(2\,a\,C\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\sqrt{\frac{-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}}{-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}}}\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-b\,e+a\,f)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}}{\frac{f}{-b\,e+a\,f}-\frac{h}{-b\,g+a\,h}}}\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)-$$

$$\left(C\,(-b\,g+a\,h)\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)\sqrt{\frac{-\frac{d}{-b\,c+a\,d}+\frac{1}{a+b\,x}}{-\frac{d}{-b\,c+a\,d}+\frac{h}{-b\,g+a\,h}}}\right.$$

$$\sqrt{-\frac{\left(-\frac{f}{-b\,e+a\,f}+\frac{1}{a+b\,x}\right)\left(-\frac{h}{-b\,g+a\,h}+\frac{1}{a+b\,x}\right)}{\left(-\frac{f}{-b\,e+a\,f}+\frac{h}{-b\,g+a\,h}\right)^2}}\,\text{EllipticPi}\left[-\frac{-b\,f\,g+b\,e\,h}{(-b\,e+a\,f)\,h},\right.$$

$$\left.\text{ArcSin}\left[\sqrt{\frac{(-b\,e+a\,f)\left(-h-\frac{b\,g}{a+b\,x}+\frac{a\,h}{a+b\,x}\right)}{b\,(-f\,g+e\,h)}}\right],\frac{(-b\,c+a\,d)\,(-f\,g+e\,h)}{(-b\,e+a\,f)\,(-d\,g+c\,h)}\right]\Big)\Big/$$

$$\left.\left(h\sqrt{\left(d+\frac{b\,c-a\,d}{a+b\,x}\right)\left(f+\frac{b\,e-a\,f}{a+b\,x}\right)\left(h+\frac{b\,g-a\,h}{a+b\,x}\right)}\right)\right)$$

Problem 35: Result more than twice size of optimal antiderivative.

$$\int\frac{A+C\,x^2}{(a+b\,x)^{5/2}\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}\,\mathbb{d}x$$

Optimal (type 4, 1070 leaves, 8 steps):

$$-\left(\left(4\,d\left(A\,b^3\left(d\,e\,g+c\,f\,g+c\,e\,h\right)+a^3\,C\left(d\,f\,g+d\,e\,h+c\,f\,h\right)+\right.\right.\right.$$
$$\left.\left.\left.a^2\,b\left(3\,A\,d\,f\,h-2\,C\left(d\,e\,g+c\,f\,g+c\,e\,h\right)\right)-a\,b^2\left(2\,A\,d\left(f\,g+e\,h\right)-c\left(3\,C\,e\,g-2\,A\,f\,h\right)\right)\right)\right.$$
$$\left.\sqrt{a+b\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)\Big/\left(3\left(b\,c-a\,d\right)^2\left(b\,e-a\,f\right)^2\left(b\,g-a\,h\right)^2\sqrt{c+d\,x}\right)\Big)-$$
$$\frac{2\left(A\,b^2+a^2\,C\right)\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}}{3\left(b\,c-a\,d\right)\left(b\,e-a\,f\right)\left(b\,g-a\,h\right)\left(a+b\,x\right)^{3/2}}+$$
$$\left(4\,b\left(A\,b^3\left(d\,e\,g+c\,f\,g+c\,e\,h\right)+a^3\,C\left(d\,f\,g+d\,e\,h+c\,f\,h\right)+a^2\,b\left(3\,A\,d\,f\,h-2\,C\left(d\,e\,g+c\,f\,g+c\,e\,h\right)\right)-\right.\right.$$
$$\left.\left.a\,b^2\left(2\,A\,d\left(f\,g+e\,h\right)-c\left(3\,C\,e\,g-2\,A\,f\,h\right)\right)\right)\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\right)\Big/$$
$$\left(3\left(b\,c-a\,d\right)^2\left(b\,e-a\,f\right)^2\left(b\,g-a\,h\right)^2\sqrt{a+b\,x}\right)+\left(4\sqrt{d\,g-c\,h}\,\sqrt{f\,g-e\,h}\right.$$
$$\left(A\,b^3\left(d\,e\,g+c\,f\,g+c\,e\,h\right)+a^3\,C\left(d\,f\,g+d\,e\,h+c\,f\,h\right)+a^2\,b\left(3\,A\,d\,f\,h-2\,C\left(d\,e\,g+c\,f\,g+c\,e\,h\right)\right)-\right.$$
$$\left.a\,b^2\left(2\,A\,d\left(f\,g+e\,h\right)-c\left(3\,C\,e\,g-2\,A\,f\,h\right)\right)\right)\sqrt{a+b\,x}\,\sqrt{-\frac{\left(d\,e-c\,f\right)\left(g+h\,x\right)}{\left(f\,g-e\,h\right)\left(c+d\,x\right)}}$$
$$\left.\text{EllipticE}\left[\text{ArcSin}\left[\frac{\sqrt{d\,g-c\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}}\right],\frac{\left(b\,c-a\,d\right)\left(f\,g-e\,h\right)}{\left(b\,e-a\,f\right)\left(d\,g-c\,h\right)}\right]\right)\Big/$$
$$\left(3\left(b\,c-a\,d\right)^2\left(b\,e-a\,f\right)^2\left(b\,g-a\,h\right)^2\sqrt{\frac{\left(d\,e-c\,f\right)\left(a+b\,x\right)}{\left(b\,e-a\,f\right)\left(c+d\,x\right)}}\,\sqrt{g+h\,x}\right)-$$
$$\left(2\left(3\,a\,b\left(c^2\,C+A\,d^2\right)\left(f\,g+e\,h\right)-b^2\left(2\,A\,d^2\,e\,g+A\,c\,d\left(f\,g+e\,h\right)+c^2\left(3\,C\,e\,g-A\,f\,h\right)\right)-\right.\right.$$
$$\left.\left.a^2\left(3\,A\,d^2\,f\,h-C\left(d^2\,e\,g-c\,d\,f\,g-c\,d\,e\,h-2\,c^2\,f\,h\right)\right)\right)\sqrt{\frac{\left(b\,e-a\,f\right)\left(c+d\,x\right)}{\left(d\,e-c\,f\right)\left(a+b\,x\right)}}$$
$$\sqrt{g+h\,x}\,\text{EllipticF}\left[\text{ArcSin}\left[\frac{\sqrt{b\,g-a\,h}\,\sqrt{e+f\,x}}{\sqrt{f\,g-e\,h}\,\sqrt{a+b\,x}}\right],-\frac{\left(b\,c-a\,d\right)\left(f\,g-e\,h\right)}{\left(d\,e-c\,f\right)\left(b\,g-a\,h\right)}\right]\Big)\Big/$$
$$\left(3\left(b\,c-a\,d\right)^2\left(b\,e-a\,f\right)\left(b\,g-a\,h\right)^{3/2}\sqrt{f\,g-e\,h}\,\sqrt{c+d\,x}\,\sqrt{-\frac{\left(b\,e-a\,f\right)\left(g+h\,x\right)}{\left(f\,g-e\,h\right)\left(a+b\,x\right)}}\right)$$

Result (type 4, 11 160 leaves):

$$\sqrt{a+b\,x}\,\sqrt{c+d\,x}\,\sqrt{e+f\,x}\,\sqrt{g+h\,x}\left(-\frac{2\left(A\,b^2+a^2\,C\right)}{3\left(b\,c-a\,d\right)\left(b\,e-a\,f\right)\left(b\,g-a\,h\right)\left(a+b\,x\right)^2}+\right.$$
$$\left(4\,b\left(3\,a\,b^2\,c\,C\,e\,g+A\,b^3\,d\,e\,g-2\,a^2\,b\,C\,d\,e\,g+A\,b^3\,c\,f\,g-2\,a^2\,b\,c\,C\,f\,g-2\,a\,A\,b^2\,d\,f\,g+a^3\,C\,d\,f\,g+\right.\right.$$
$$\left.\left.A\,b^3\,c\,e\,h-2\,a^2\,b\,c\,C\,e\,h-2\,a\,A\,b^2\,d\,e\,h+a^3\,C\,d\,e\,h-2\,a\,A\,b^2\,c\,f\,h+a^3\,c\,C\,f\,h+3\,a^2\,A\,b\,d\,f\,h\right)\right)\Big/$$
$$\left.\left(3\left(b\,c-a\,d\right)^2\left(b\,e-a\,f\right)^2\left(b\,g-a\,h\right)^2\left(a+b\,x\right)\right)\right)+\frac{1}{3\,b^2\left(-b\,c+a\,d\right)^2\left(-b\,e+a\,f\right)^2\left(-b\,g+a\,h\right)^2}$$

$$2\left(-\left(\left(2\left(3abc^2CeG+Ab^3deg-2a^2bCdeg+Ab^3cfg-2a^2bcCfg-2aAb^2dfg+a^3Cdfg+A\right.\right.\right.\right.$$

$$\left.\left.\left.\left.b^3ceh-2a^2bcCeh-2aAb^2deh+a^3Cdeh-2aAb^2cfh+a^3cCfh+3a^2Abdfh\right)\right.\right.\right.$$

$$(a+bx)^{5/2}\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\Bigg)\Bigg/$$

$$\left(\sqrt{c+\frac{(a+bx)\left(d-\frac{ad}{a+bx}\right)}{b}}\sqrt{e+\frac{(a+bx)\left(f-\frac{af}{a+bx}\right)}{b}}\sqrt{g+\frac{(a+bx)\left(h-\frac{ah}{a+bx}\right)}{b}}\right)+$$

$$\frac{1}{\sqrt{c+\frac{(a+bx)\left(d-\frac{ad}{a+bx}\right)}{b}}\sqrt{e+\frac{(a+bx)\left(f-\frac{af}{a+bx}\right)}{b}}\sqrt{g+\frac{(a+bx)\left(h-\frac{ah}{a+bx}\right)}{b}}}(bc-ad)(be-af)$$

$$(bg-ah)(a+bx)^{3/2}\sqrt{\left(\left(d+\frac{bc}{a+bx}-\frac{ad}{a+bx}\right)\left(f+\frac{be}{a+bx}-\frac{af}{a+bx}\right)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)\right)}$$

$$\left(\left(\left(6ab^2cCeg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\right.\right.\right.$$

$$\left.\left.\left.\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left(bdg-bch\right)\text{EllipticE}\left[\right.\right.\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Bigg/\right.\right.\right.\right.$$

$$\left.\left.\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\right)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2Ab^3deg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\left.\right]\Big/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(4a^2bCdeg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\left.\right]\Big/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(2 A b^3 c f g\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\Bigg)\Bigg)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(4 a^2 b c C f g\sqrt{\frac{(b c-a d)(b g-a h)\left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\left(-\left(\left(\left((b d g-b c h)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(b e-a f)\left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b(-f g+e h)}}\right],\frac{(-b c+a d)(-f g+e h)}{(-b e+a f)(-d g+c h)}\right]\right)\Big/\right.$$

$$\left.\left((b c-a d)(b g-a h)\right)\right)-\frac{1}{-b c+a d}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Bigg],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(4aAb^2dfg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Bigg[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Bigg],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg)\Bigg/$$

$$\left.\left.\left.\left.((bc-ad)(bg-ah))\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[\right.\right.\right.\right.$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Bigg],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2a^3Cdfg\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\Big[\right.\right.\right.\right.$$

$$\text{ArcSin}\Bigg[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Bigg],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg)\Bigg/$$

$$\left(\left((b c-a d)\ (b g-a h)\right)\right)\Bigg)\Bigg(-\frac{1}{-b c+a d} d\ \text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\ \left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ \Big],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\Bigg(2 A b^3 c e h\sqrt{\frac{(b c-a d)\ (b g-a h)\ \left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\ \left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\ \Bigg(-\Bigg(\Bigg(\Big((b d g-b c h)\ \text{EllipticE}\Big[$$

$$\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\ \left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ \Big],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\left((b c-a d)\ (b g-a h)\right)\right)\Bigg)\Bigg(-\frac{1}{-b c+a d} d\ \text{EllipticF}\Big[\text{ArcSin}\Big[\sqrt{\frac{(b e-a f)\ \left(h+\frac{b g}{a+b x}-\frac{a h}{a+b x}\right)}{b\ (-f g+e h)}}\ \Big],\ \frac{(-b c+a d)\ (-f g+e h)}{(-b e+a f)\ (-d g+c h)}\Big]\Bigg)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\Bigg(4 a^2 b c C e h\sqrt{\frac{(b c-a d)\ (b g-a h)\ \left(-\frac{d}{-b c+a d}+\frac{1}{a+b x}\right)}{b d g-b c h}}\ \left(-\frac{f}{-b e+a f}+\frac{1}{a+b x}\right)$$

$$\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\ \Bigg(-\Bigg(\Bigg(\Big((b d g-b c h)\ \text{EllipticE}\Big[$$

$$\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg/$$

$$\left((bc-ad)(bg-ah)\right)\Bigg) - \frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Big)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right) -$$

$$\Bigg(4aAb^2deh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\Bigg(-\Bigg(\Bigg(\Big((bdg-bch)\,\text{EllipticE}\Big[$$

$$\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Bigg]\Bigg/$$

$$\left((bc-ad)(bg-ah)\right)\Bigg) - \frac{1}{-bc+ad}d\,\text{EllipticF}\Big[\text{ArcSin}\Big[$$

$$\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\Big],\ \frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\Big]\Big)\Bigg/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right) +$$

$$\Bigg(2a^3Cdeh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-\left(4aAb^2cfh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(2a^3cCfh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Big)\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(6a^2Abdfh\sqrt{\frac{(bc-ad)(bg-ah)\left(-\frac{d}{-bc+ad}+\frac{1}{a+bx}\right)}{bdg-bch}}\left(-\frac{f}{-be+af}+\frac{1}{a+bx}\right)\right.$$

$$\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\left(-\left(\left(\left((bdg-bch)\,\text{EllipticE}\left[\right.\right.\right.\right.$$

$$\left.\left.\left.\left.\text{ArcSin}\left[\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left.\left((bc-ad)(bg-ah)\right)\right)-\frac{1}{-bc+ad}d\,\text{EllipticF}\left[\text{ArcSin}\left[\right.\right.$$

$$\left.\left.\sqrt{\frac{(be-af)\left(h+\frac{bg}{a+bx}-\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\Big)\Big)\Big/$$

$$\left(\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(3b^2cCeg\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(3abCdeg\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(3abcCfg\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(Ab^2dfg\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right)$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(2 a^2 C d f g\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(3 a b c C e h\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)+$$

$$\left(A b^2 d e h\sqrt{\frac{-\frac{d}{-b c+a d}+\frac{1}{a+b x}}{-\frac{d}{-b c+a d}+\frac{h}{-b g+a h}}}\sqrt{\frac{-\frac{f}{-b e+a f}+\frac{1}{a+b x}}{-\frac{f}{-b e+a f}+\frac{h}{-b g+a h}}}\left(-\frac{h}{-b g+a h}+\frac{1}{a+b x}\right)\right.$$

$$\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{\left(-b e+a f\right)\left(-h-\frac{b g}{a+b x}+\frac{a h}{a+b x}\right)}{b\left(-f g+e h\right)}}\right],\frac{\left(-b c+a d\right)\left(-f g+e h\right)}{\left(-b e+a f\right)\left(-d g+c h\right)}\right]\Bigg/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)-$$

$$\left(2a^2CdeH\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)+$$

$$\left(Ab^2cfH\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

$$\left(2a^2cCfH\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-bg+ah}+\frac{1}{a+bx}}{\frac{f}{-be+af}-\frac{h}{-bg+ah}}}\sqrt{\left(d+\frac{bc-ad}{a+bx}\right)\left(f+\frac{be-af}{a+bx}\right)\left(h+\frac{bg-ah}{a+bx}\right)}\right)-$$

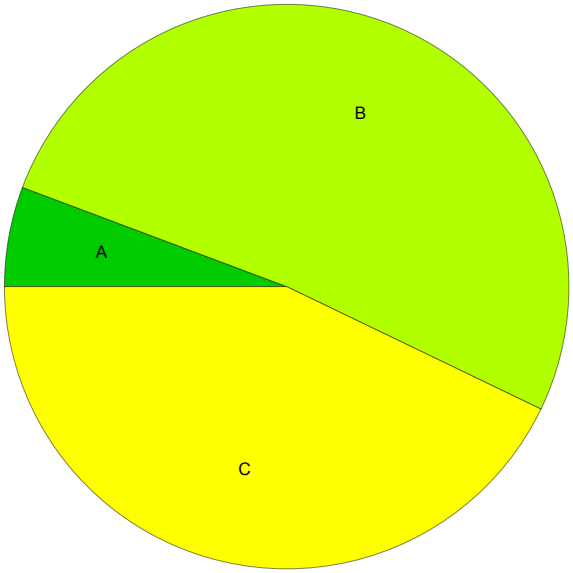
$$\left(3aAbdfH\sqrt{\frac{-\frac{d}{-bc+ad}+\frac{1}{a+bx}}{-\frac{d}{-bc+ad}+\frac{h}{-bg+ah}}}\sqrt{\frac{-\frac{f}{-be+af}+\frac{1}{a+bx}}{-\frac{f}{-be+af}+\frac{h}{-bg+ah}}}\left(-\frac{h}{-bg+ah}+\frac{1}{a+bx}\right)\right.$$

$$\left.\text{EllipticF}\left[\text{ArcSin}\left[\sqrt{\frac{(-be+af)\left(-h-\frac{bg}{a+bx}+\frac{ah}{a+bx}\right)}{b(-fg+eh)}}\right],\frac{(-bc+ad)(-fg+eh)}{(-be+af)(-dg+ch)}\right]\right)\Big/$$

$$\left(\sqrt{\frac{-\frac{h}{-b g+a h}+\frac{1}{a+b x}}{\frac{f}{-b e+a f}-\frac{h}{-b g+a h}}}\ \sqrt{\left(d+\frac{b c-a d}{a+b x}\right)\left(f+\frac{b e-a f}{a+b x}\right)\left(h+\frac{b g-a h}{a+b x}\right)}\right)\Bigg)\Bigg)$$

Summary of Integration Test Results

35 integration problems



A - 2 optimal antiderivatives

B - 18 more than twice size of optimal antiderivatives

C - 15 unnecessarily complex antiderivatives

D - 0 unable to integrate problems

E - 0 integration timeouts