

EXACT VALUES FOR THE SIN OF ALL INTEGERS...BY JAMES T. PARENT	
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1	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{384}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})+\frac{1}{192}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{48}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})-\frac{1}{24}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{384}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})+\frac{1}{192}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{48}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})-\frac{1}{24}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
2	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right)$
3	$\frac{1}{48}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})-\frac{1}{24}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}$
4	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)\left(\frac{1}{3}\right)$
5	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{32}\sqrt{6}\left(1-\frac{1}{3}\sqrt{3}\right)+\frac{1}{32}I\sqrt{-6\left(1-\frac{1}{3}\sqrt{3}\right)^2+16}\right)\left(\frac{1}{3}\right)+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{32}\sqrt{6}\left(1-\frac{1}{3}\sqrt{3}\right)-\frac{1}{32}I\sqrt{-6\left(1-\frac{1}{3}\sqrt{3}\right)^2+16}\right)\left(\frac{1}{3}\right)$
6	$\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}$
7	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}+\frac{1}{128}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{16}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}+\frac{1}{128}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{16}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})\right)^2+1}\right)\left(\frac{1}{3}\right)$
8	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})+\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})+\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
9	$\frac{1}{8}\sqrt{2}(1+\sqrt{5})-\frac{1}{8}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}$
10	$-\frac{1}{8}(-4+4I\sqrt{3})\left(\frac{1}{3}\right)(1+I\sqrt{3})-\frac{1}{8}(-4-4I\sqrt{3})\left(\frac{1}{3}\right)(1-I\sqrt{3})$
11	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)(1+\sqrt{3})-\frac{1}{64}(\sqrt{3}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{2}(\sqrt{5}-1)(1+\sqrt{3})+\frac{1}{8}(\sqrt{3}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)(1+\sqrt{3})-\frac{1}{64}(\sqrt{3}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{2}(\sqrt{5}-1)(1+\sqrt{3})+\frac{1}{8}(\sqrt{3}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
12	$\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)$
13	$\frac{1}{2}\text{sqrr}\left(2+2\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)\left(\frac{1}{3}\right)\right.$ $\left.+2\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)\left(\frac{1}{3}\right)\right)$
14	$\frac{1}{2}\text{sqrr}\left(2+2\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right)\right.$ $\left.+2\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right)\right)$

15	$\frac{1}{4}\sqrt{2}(\sqrt{3}-1)$ or $-\frac{1}{2}\left(\left(-\frac{1}{16}+\frac{1}{16}I\right)\sqrt{2}\right)^{\left(\frac{1}{3}\right)}(1+I\sqrt{3})-\frac{1}{2}\left(\left(-\frac{1}{16}-\frac{1}{16}I\right)\sqrt{2}\right)^{\left(\frac{1}{3}\right)}(1-I\sqrt{3})$
16	$\frac{1}{2}\sqrt[3]{2-2\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)^{\left(\frac{1}{3}\right)}}-2\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)^{\left(\frac{1}{3}\right)}$
17	$\frac{1}{2}\sqrt[3]{2-2\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)^{\left(\frac{1}{3}\right)}}-2\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)^{\left(\frac{1}{3}\right)}$
18	$\frac{1}{4}\sqrt{5}-\frac{1}{4}$
19	$\frac{1}{2}\sqrt[3]{2-2\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})+\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)^{\left(\frac{1}{3}\right)}}-2\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})+\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)^{\left(\frac{1}{3}\right)}$
20	$-\frac{1}{8}(-4\sqrt{3}+4I)^{\left(\frac{1}{3}\right)}(1+I\sqrt{3})-\frac{1}{8}(-4\sqrt{3}-4I)^{\left(\frac{1}{3}\right)}(1-I\sqrt{3})$
21	$\frac{1}{16}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{16}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})$
22	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}-\frac{1}{64}\sqrt{5}+\frac{1}{128}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}-\frac{1}{128}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}+\frac{1}{8}\sqrt{5}-\frac{1}{16}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}\right)^2+1}\right)^{\left(\frac{1}{3}\right)}+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}-\frac{1}{64}\sqrt{5}+\frac{1}{128}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}-\frac{1}{128}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}+\frac{1}{8}\sqrt{5}-\frac{1}{16}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}\right)^2+1}\right)^{\left(\frac{1}{3}\right)}$
23	$\frac{1}{2}\sqrt[3]{2-2\left(-\frac{1}{16}\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)\sqrt{9-\sqrt{5}+\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}}+\frac{1}{8}\sqrt{\frac{1}{4}\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2(9-\sqrt{5}+\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3})-1}\right)^{\left(\frac{1}{3}\right)}}-2\left(-\frac{1}{16}\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)\sqrt{9-\sqrt{5}+\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}}-\frac{1}{8}\sqrt{\frac{1}{4}\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2(9-\sqrt{5}+\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3})-1}\right)^{\left(\frac{1}{3}\right)}$
24	$\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}$
25	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{32}\sqrt{6}\left(1+\frac{1}{3}\sqrt{3}\right)+\frac{1}{32}I\sqrt{-6\left(1+\frac{1}{3}\sqrt{3}\right)^2+16}\right)^{\left(\frac{1}{3}\right)}+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{32}\sqrt{6}\left(1+\frac{1}{3}\sqrt{3}\right)-\frac{1}{32}I\sqrt{-6\left(1+\frac{1}{3}\sqrt{3}\right)^2+16}\right)^{\left(\frac{1}{3}\right)}$

26	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(\frac{1}{64}-\frac{1}{64}\sqrt{5}-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}+\frac{1}{8}I\sqrt{-\left(-\frac{1}{8}+\frac{1}{8}\sqrt{5}+\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(\frac{1}{64}-\frac{1}{64}\sqrt{5}-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}-\frac{1}{8}I\sqrt{-\left(-\frac{1}{8}+\frac{1}{8}\sqrt{5}+\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}\right)^2+1}\right)\left(\frac{1}{3}\right)$
27	$\frac{1}{4}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{2}(\sqrt{5}-1)$
28	$\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right. \\ \left.+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})\right. \\ \left.-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
29	$\frac{1}{2}\sqrt[4]{2-2\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)}\left(\frac{1}{3}\right)$ $-2\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
30	$\frac{1}{2}$
31	$\frac{1}{2}\sqrt[4]{2-2\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)}$ $\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)-$ $2\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)$ $\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
32	$\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
33	$\frac{1}{16}\sqrt{2}(\sqrt{5}-1)(1+\sqrt{3})+\frac{1}{8}(\sqrt{3}-1)\sqrt{5+\sqrt{5}}$
34	$\left(\frac{1}{64}-\frac{1}{64}\sqrt{5}-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}+\frac{1}{8}I\sqrt{-\left(-\frac{1}{8}+\frac{1}{8}\sqrt{5}+\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(\frac{1}{64}-\frac{1}{64}\sqrt{5}-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}-\frac{1}{8}I\sqrt{-\left(-\frac{1}{8}+\frac{1}{8}\sqrt{5}+\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}\right)^2+1}\right)\left(\frac{1}{3}\right)$
35	$\left(-\frac{1}{32}\sqrt{6}\left(1+\frac{1}{3}\sqrt{3}\right)+\frac{1}{32}I\sqrt{-6\left(1+\frac{1}{3}\sqrt{3}\right)^2+16}\right)\left(\frac{1}{3}\right)+\left(-\frac{1}{32}\sqrt{6}\left(1+\frac{1}{3}\sqrt{3}\right)-\frac{1}{32}I\sqrt{-6\left(1+\frac{1}{3}\sqrt{3}\right)^2+16}\right)\left(\frac{1}{3}\right)$
36	$\frac{1}{8}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}$

37	$\frac{1}{8}(-4\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}-4\sqrt{2}\sqrt{5}+4\sqrt{5}\sqrt{5+\sqrt{5}}-4\sqrt{2}-4\sqrt{5+\sqrt{5}}-4\sqrt{2}\sqrt{5}\sqrt{3}-4\sqrt{2}\sqrt{3}+4\sqrt{5+\sqrt{5}}\sqrt{3}$ $+16I\sqrt{\sqrt{3}-\sqrt{5}\sqrt{3}-\sqrt{2}\sqrt{5+\sqrt{5}}+8})\left(\frac{1}{3}\right)+\frac{1}{8}(-4\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}-4\sqrt{2}\sqrt{5}+4\sqrt{5}\sqrt{5+\sqrt{5}}-4\sqrt{2}-4\sqrt{5+\sqrt{5}}-4\sqrt{2}\sqrt{5}\sqrt{3}-4\sqrt{2}\sqrt{3}$ $+4\sqrt{5+\sqrt{5}}\sqrt{3}-16I\sqrt{\sqrt{3}-\sqrt{5}\sqrt{3}-\sqrt{2}\sqrt{5+\sqrt{5}}+8})\left(\frac{1}{3}\right)$
38	$\left(-\frac{1}{64}-\frac{1}{64}\sqrt{5}+\frac{1}{128}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}-\frac{1}{128}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}\right.$ $+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}+\frac{1}{8}\sqrt{5}-\frac{1}{16}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}\right)^2+1}\left(\frac{1}{3}\right)+\left(-\frac{1}{64}-\frac{1}{64}\sqrt{5}+\frac{1}{128}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}\right.$ $-\frac{1}{128}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}+\frac{1}{8}\sqrt{5}-\frac{1}{16}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}\right)^2+1}\left(\frac{1}{3}\right)$
39	$\frac{1}{32}\sqrt{2}(2\sqrt{3}(1+\sqrt{5})+\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+2+2\sqrt{5})$
40	$\frac{1}{4}\left(-\frac{1}{8}(-4\sqrt{3}+4I)\left(\frac{1}{3}\right)(1+I\sqrt{3})-\frac{1}{8}(-4\sqrt{3}-4I)\left(\frac{1}{3}\right)(1-I\sqrt{3})\right)^2\left(\frac{2}{3}\right)\left((\sqrt{2}(-\sqrt{3}-1+I\sqrt{3}-I))\left(\frac{1}{3}\right)+(-\sqrt{2}(\sqrt{3}+1+I\sqrt{3}-I))\left(\frac{1}{3}\right)\right)$ $\left((\sqrt{2}(-\sqrt{3}+1+I\sqrt{3}+I))\left(\frac{1}{3}\right)+(-\sqrt{2}(\sqrt{3}-1+I\sqrt{3}+I))\left(\frac{1}{3}\right)\right)$
41	$\frac{1}{2}\sqrt{2-2\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)}$ $\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})+\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)-2$ $\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)$ $\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})+\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
42	$\frac{1}{32}((\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}-\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5}))\sqrt{\sqrt{3}\sqrt{5}-\sqrt{3}+\sqrt{2}\sqrt{5+\sqrt{5}}+8}$
43	$\left(-\frac{1}{128}\sqrt{2}\sqrt{3}+\frac{1}{128}\sqrt{5+\sqrt{5}}\sqrt{3}-\frac{1}{128}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{5}\sqrt{5+\sqrt{5}}+\frac{1}{128}\sqrt{2}\sqrt{5}+\frac{1}{128}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{2}\sqrt{5}\sqrt{3}+\frac{1}{128}\sqrt{2}\right.$ $+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{2}\sqrt{3}-\frac{1}{16}\sqrt{5+\sqrt{5}}\sqrt{3}+\frac{1}{16}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{5}\sqrt{5+\sqrt{5}}-\frac{1}{16}\sqrt{2}\sqrt{5}-\frac{1}{16}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}-\frac{1}{16}\sqrt{2}\right)^2+1}\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{128}\sqrt{2}\sqrt{3}+\frac{1}{128}\sqrt{5+\sqrt{5}}\sqrt{3}-\frac{1}{128}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{5}\sqrt{5+\sqrt{5}}+\frac{1}{128}\sqrt{2}\sqrt{5}+\frac{1}{128}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{2}\sqrt{5}\sqrt{3}+\frac{1}{128}\sqrt{2}\right.$ $-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{2}\sqrt{3}-\frac{1}{16}\sqrt{5+\sqrt{5}}\sqrt{3}+\frac{1}{16}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{5}\sqrt{5+\sqrt{5}}-\frac{1}{16}\sqrt{2}\sqrt{5}-\frac{1}{16}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}-\frac{1}{16}\sqrt{2}\right)^2+1}\left(\frac{1}{3}\right)$

44	$\left(-\frac{1}{16} \left(\frac{1}{8} \sqrt{3} (1 + \sqrt{5}) - \frac{1}{16} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} \right) \sqrt{9 - \sqrt{5} + \sqrt{2} \sqrt{5 + \sqrt{5}} \sqrt{3}} \right. \\ + \frac{1}{16} I \sqrt{ - \left(\frac{1}{8} \sqrt{3} (1 + \sqrt{5}) - \frac{1}{16} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} \right)^2 (9 - \sqrt{5} + \sqrt{2} \sqrt{5 + \sqrt{5}} \sqrt{3}) + 4 } \Bigg) \left(\frac{1}{3} \right) + \left(\right. \\ - \frac{1}{16} \left(\frac{1}{8} \sqrt{3} (1 + \sqrt{5}) - \frac{1}{16} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} \right) \sqrt{9 - \sqrt{5} + \sqrt{2} \sqrt{5 + \sqrt{5}} \sqrt{3}} \\ \left. - \frac{1}{16} I \sqrt{ - \left(\frac{1}{8} \sqrt{3} (1 + \sqrt{5}) - \frac{1}{16} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} \right)^2 (9 - \sqrt{5} + \sqrt{2} \sqrt{5 + \sqrt{5}} \sqrt{3}) + 4 } \right) \Bigg) \left(\frac{1}{3} \right)$
45	$\frac{1}{2} \sqrt{2}$
46	$\left(-\frac{1}{256} ((\sqrt{5} - 1)(1 + \sqrt{3}) \sqrt{5 + \sqrt{5}} - \sqrt{2} (\sqrt{3} - 1)(1 + \sqrt{5})) \sqrt{\sqrt{3} \sqrt{5} - \sqrt{3} + \sqrt{2} \sqrt{5 + \sqrt{5}} + 8} \right. \\ + \frac{1}{256} I \sqrt{ - ((\sqrt{5} - 1)(1 + \sqrt{3}) \sqrt{5 + \sqrt{5}} - \sqrt{2} (\sqrt{3} - 1)(1 + \sqrt{5}))^2 (\sqrt{3} \sqrt{5} - \sqrt{3} + \sqrt{2} \sqrt{5 + \sqrt{5}} + 8) + 1024 } \Bigg) \left(\frac{1}{3} \right) + \left(\right. \\ - \frac{1}{256} ((\sqrt{5} - 1)(1 + \sqrt{3}) \sqrt{5 + \sqrt{5}} - \sqrt{2} (\sqrt{3} - 1)(1 + \sqrt{5})) \sqrt{\sqrt{3} \sqrt{5} - \sqrt{3} + \sqrt{2} \sqrt{5 + \sqrt{5}} + 8} \\ \left. - \frac{1}{256} I \sqrt{ - ((\sqrt{5} - 1)(1 + \sqrt{3}) \sqrt{5 + \sqrt{5}} - \sqrt{2} (\sqrt{3} - 1)(1 + \sqrt{5}))^2 (\sqrt{3} \sqrt{5} - \sqrt{3} + \sqrt{2} \sqrt{5 + \sqrt{5}} + 8) + 1024 } \right) \Bigg) \left(\frac{1}{3} \right)$
47	$\left(-\frac{1}{256} \sqrt{2} (2 \sqrt{3} (1 + \sqrt{5}) + \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} - \sqrt{6} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} + 2 + 2 \sqrt{5}) \right. \\ + \frac{1}{256} I \sqrt{ - 2 (2 \sqrt{3} (1 + \sqrt{5}) + \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} - \sqrt{6} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} + 2 + 2 \sqrt{5})^2 + 1024 } \Bigg) \left(\frac{1}{3} \right) + \left(\right. \\ - \frac{1}{256} \sqrt{2} (2 \sqrt{3} (1 + \sqrt{5}) + \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} - \sqrt{6} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} + 2 + 2 \sqrt{5}) \\ \left. - \frac{1}{256} I \sqrt{ - 2 (2 \sqrt{3} (1 + \sqrt{5}) + \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} - \sqrt{6} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} + 2 + 2 \sqrt{5})^2 + 1024 } \right) \Bigg) \left(\frac{1}{3} \right)$
48	$\frac{1}{2} \left(\frac{1}{8} \sqrt{3} (1 + \sqrt{5}) - \frac{1}{16} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} \right) \sqrt{9 - \sqrt{5} + \sqrt{2} \sqrt{5 + \sqrt{5}} \sqrt{3}}$
49	$\left(-\frac{1}{128} \sqrt{2} (\sqrt{5} - 1)(1 + \sqrt{3}) - \frac{1}{64} (\sqrt{3} - 1) \sqrt{5 + \sqrt{5}} + \frac{1}{8} I \sqrt{ - \left(\frac{1}{16} \sqrt{2} (\sqrt{5} - 1)(1 + \sqrt{3}) + \frac{1}{8} (\sqrt{3} - 1) \sqrt{5 + \sqrt{5}} \right)^2 + 1 } \right) \left(\frac{1}{3} \right) \\ + \left(-\frac{1}{128} \sqrt{2} (\sqrt{5} - 1)(1 + \sqrt{3}) - \frac{1}{64} (\sqrt{3} - 1) \sqrt{5 + \sqrt{5}} - \frac{1}{8} I \sqrt{ - \left(\frac{1}{16} \sqrt{2} (\sqrt{5} - 1)(1 + \sqrt{3}) + \frac{1}{8} (\sqrt{3} - 1) \sqrt{5 + \sqrt{5}} \right)^2 + 1 } \right) \left(\frac{1}{3} \right)$
50	$\left(-\frac{1}{16} + \frac{1}{16} I \sqrt{3} \right) \left(\frac{1}{3} \right) + \left(-\frac{1}{16} - \frac{1}{16} I \sqrt{3} \right) \left(\frac{1}{3} \right)$
51	$\frac{1}{16} \sqrt{2} \sqrt{3} - \frac{1}{16} \sqrt{5 + \sqrt{5}} \sqrt{3} + \frac{1}{16} \sqrt{5} \sqrt{3} \sqrt{5 + \sqrt{5}} + \frac{1}{16} \sqrt{5} \sqrt{5 + \sqrt{5}} - \frac{1}{16} \sqrt{2} \sqrt{5} - \frac{1}{16} \sqrt{5 + \sqrt{5}} + \frac{1}{16} \sqrt{2} \sqrt{5} \sqrt{3} - \frac{1}{16} \sqrt{2}$
52	$\left(-\frac{1}{64} \sqrt{3} (1 + \sqrt{5}) + \frac{1}{128} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} + \frac{1}{8} I \sqrt{ - \left(\frac{1}{8} \sqrt{3} (1 + \sqrt{5}) - \frac{1}{16} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} \right)^2 + 1 } \right) \left(\frac{1}{3} \right) \\ + \left(-\frac{1}{64} \sqrt{3} (1 + \sqrt{5}) + \frac{1}{128} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} - \frac{1}{8} I \sqrt{ - \left(\frac{1}{8} \sqrt{3} (1 + \sqrt{5}) - \frac{1}{16} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} \right)^2 + 1 } \right) \left(\frac{1}{3} \right)$

53	$\left(-\frac{1}{128}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}+\frac{1}{128}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})\right. \\ \left.+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{16}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})\right)^2+1}\right)\left(\frac{1}{3}\right)+\left(-\frac{1}{128}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}\right. \\ \left.+\frac{1}{128}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{16}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})\right)^2+1}\right)\left(\frac{1}{3}\right)$
54	$\frac{1}{4}+\frac{1}{4}\sqrt{5}$
55	$\frac{1}{4}2^{\left(\frac{1}{3}\right)}(\sqrt{2}(-\sqrt{3}+1+I\sqrt{3}+I))^{\left(\frac{1}{3}\right)}+\frac{1}{4}2^{\left(\frac{1}{3}\right)}(-\sqrt{2}(\sqrt{3}-1+I\sqrt{3}+I))^{\left(\frac{1}{3}\right)}$
56	$\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)\left(\frac{1}{3}\right) \\ +\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)\left(\frac{1}{3}\right)$
57	$\left(-\frac{1}{64}\sqrt{2}(1+\sqrt{5})+\frac{1}{64}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}(1+\sqrt{5})-\frac{1}{8}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right) \\ +\left(-\frac{1}{64}\sqrt{2}(1+\sqrt{5})+\frac{1}{64}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}(1+\sqrt{5})-\frac{1}{8}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
58	$\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right) \\ +\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right)$
59	$\left(-\frac{1}{384}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})+\frac{1}{192}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}\right. \\ \left.+\frac{1}{8}I\sqrt{-\left(\frac{1}{48}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})-\frac{1}{24}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)+\left(-\frac{1}{384}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})\right. \\ \left.+\frac{1}{192}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{48}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})-\frac{1}{24}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
60	$\frac{1}{2}\sqrt{3}$
61	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{384}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})+\frac{1}{192}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}\right. \\ \left.+\frac{1}{8}I\sqrt{-\left(\frac{1}{48}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})-\frac{1}{24}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{384}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})\right. \\ \left.+\frac{1}{192}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{48}\sqrt{6}(\sqrt{5}-1)(3+\sqrt{3})-\frac{1}{24}\sqrt{3}(3-\sqrt{3})\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$

62	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right)$
63	$-\frac{1}{8}\sqrt{2}+\frac{1}{4}\sqrt{5+\sqrt{5}}+\frac{1}{8}\sqrt{2}\sqrt{5}$
64	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)\left(\frac{1}{3}\right)$ $-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}+\frac{1}{64}\sqrt{3}(\sqrt{5}-1)-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}-\frac{1}{8}\sqrt{3}(\sqrt{5}-1)\right)^2+1}\right)\left(\frac{1}{3}\right)$
65	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{32}\sqrt{6}\left(1-\frac{1}{3}\sqrt{3}\right)+\frac{1}{32}I\sqrt{-6\left(1-\frac{1}{3}\sqrt{3}\right)^2+16}\right)\left(\frac{1}{3}\right)-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{32}\sqrt{6}\left(1-\frac{1}{3}\sqrt{3}\right)-\frac{1}{32}I\sqrt{-6\left(1-\frac{1}{3}\sqrt{3}\right)^2+16}\right)\left(\frac{1}{3}\right)$
66	$\frac{1}{8}+\frac{1}{8}\sqrt{5}-\frac{1}{16}\sqrt{2}\sqrt{3}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}$
67	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}+\frac{1}{128}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})\right.$ $\left.+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{16}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})\right)^2+1}\right)\left(\frac{1}{3}\right)-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}+\frac{1}{128}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})\right.$ $\left.-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}(\sqrt{5}-1)(1+\sqrt{3})\sqrt{5+\sqrt{5}}-\frac{1}{16}\sqrt{2}(\sqrt{3}-1)(1+\sqrt{5})\right)^2+1}\right)\left(\frac{1}{3}\right)$
68	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})+\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})+\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
69	$\frac{1}{2}\sqrt{2}\left(\frac{1}{8}+\frac{1}{8}\sqrt{5}-\frac{1}{16}\sqrt{2}\sqrt{3}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}\right)+\frac{1}{2}\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})-\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)\sqrt{2}$
70	$\frac{1}{8}2^{\left(\frac{2}{3}\right)}\left(\left(\sqrt{2}(-\sqrt{3}-1+I\sqrt{3}-I)\right)^{\left(\frac{1}{3}\right)}+(-\sqrt{2}(\sqrt{3}+1+I\sqrt{3}-I))^{\left(\frac{1}{3}\right)}\right)\left(\left(\sqrt{2}(-\sqrt{3}+1+I\sqrt{3}+I)\right)^{\left(\frac{1}{3}\right)}+(-\sqrt{2}(\sqrt{3}-1+I\sqrt{3}+I))^{\left(\frac{1}{3}\right)}\right)$
71	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)(1+\sqrt{3})-\frac{1}{64}(\sqrt{3}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{2}(\sqrt{5}-1)(1+\sqrt{3})+\frac{1}{8}(\sqrt{3}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)(1+\sqrt{3})-\frac{1}{64}(\sqrt{3}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{2}(\sqrt{5}-1)(1+\sqrt{3})+\frac{1}{8}(\sqrt{3}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
72	$\frac{1}{4}\sqrt{2}\sqrt{5+\sqrt{5}}\qquad\qquad\qquad\frac{1}{4}\sqrt{10+2\sqrt{5}}$

73	$\frac{1}{2} \operatorname{sqr} \left(2 + 2 \left(-\frac{1}{64} \sqrt{2} \sqrt{5 + \sqrt{5}} + \frac{1}{64} \sqrt{3} (\sqrt{5} - 1) \right. \right. \\ + \frac{1}{8} I \sqrt{ -\left(\frac{1}{8} \sqrt{2} \sqrt{5 + \sqrt{5}} - \frac{1}{8} \sqrt{3} (\sqrt{5} - 1) \right)^2 + 1 } \left. \left. \right) \left(\frac{1}{3} \right) \right. \\ + 2 \left(-\frac{1}{64} \sqrt{2} \sqrt{5 + \sqrt{5}} + \frac{1}{64} \sqrt{3} (\sqrt{5} - 1) \right. \\ \left. \left. - \frac{1}{8} I \sqrt{ -\left(\frac{1}{8} \sqrt{2} \sqrt{5 + \sqrt{5}} - \frac{1}{8} \sqrt{3} (\sqrt{5} - 1) \right)^2 + 1 } \right) \left(\frac{1}{3} \right) \right)$
74	$\left(-\frac{1}{2} + \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{256} ((\sqrt{5} - 1)(1 + \sqrt{3})\sqrt{5 + \sqrt{5}} - \sqrt{2}(\sqrt{3} - 1)(1 + \sqrt{5}))\sqrt{\sqrt{5}\sqrt{3} - \sqrt{3} + \sqrt{2}\sqrt{5 + \sqrt{5}} + 8} \right. \\ + \frac{1}{256} I \sqrt{ -((\sqrt{5} - 1)(1 + \sqrt{3})\sqrt{5 + \sqrt{5}} - \sqrt{2}(\sqrt{3} - 1)(1 + \sqrt{5}))^2 (\sqrt{5}\sqrt{3} - \sqrt{3} + \sqrt{2}\sqrt{5 + \sqrt{5}} + 8) + 1024 } \left. \right) \left(\frac{1}{3} \right) \\ - \left(-\frac{1}{2} - \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{256} ((\sqrt{5} - 1)(1 + \sqrt{3})\sqrt{5 + \sqrt{5}} - \sqrt{2}(\sqrt{3} - 1)(1 + \sqrt{5}))\sqrt{\sqrt{5}\sqrt{3} - \sqrt{3} + \sqrt{2}\sqrt{5 + \sqrt{5}} + 8} \right. \\ \left. \left. - \frac{1}{256} I \sqrt{ -((\sqrt{5} - 1)(1 + \sqrt{3})\sqrt{5 + \sqrt{5}} - \sqrt{2}(\sqrt{3} - 1)(1 + \sqrt{5}))^2 (\sqrt{5}\sqrt{3} - \sqrt{3} + \sqrt{2}\sqrt{5 + \sqrt{5}} + 8) + 1024 } \right) \left(\frac{1}{3} \right) \right)$
75	$\frac{1}{4} \sqrt{2} (1 + \sqrt{3})$
76	$\frac{1}{2} \operatorname{sqr} \left(2 - 2 \left(-\frac{1}{2} + \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{128} \sqrt{6} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} + \frac{1}{64} + \frac{1}{64} \sqrt{5} + \frac{1}{8} I \sqrt{ -\left(\frac{1}{16} \sqrt{6} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} - \frac{1}{8} - \frac{1}{8} \sqrt{5} \right)^2 + 1 } \right) \left(\frac{1}{3} \right) \right. \\ \left. - 2 \left(-\frac{1}{2} - \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{128} \sqrt{6} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} + \frac{1}{64} + \frac{1}{64} \sqrt{5} - \frac{1}{8} I \sqrt{ -\left(\frac{1}{16} \sqrt{6} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} - \frac{1}{8} - \frac{1}{8} \sqrt{5} \right)^2 + 1 } \right) \left(\frac{1}{3} \right) \right)$
77	$\frac{1}{2} \operatorname{sqr} \left(2 - 2 \left(-\frac{1}{2} + \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{64} \sqrt{2} \sqrt{5 + \sqrt{5}} + \frac{1}{64} \sqrt{3} (\sqrt{5} - 1) + \frac{1}{8} I \sqrt{ -\left(\frac{1}{8} \sqrt{2} \sqrt{5 + \sqrt{5}} - \frac{1}{8} \sqrt{3} (\sqrt{5} - 1) \right)^2 + 1 } \right) \left(\frac{1}{3} \right) \right. \\ \left. - 2 \left(-\frac{1}{2} - \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{64} \sqrt{2} \sqrt{5 + \sqrt{5}} + \frac{1}{64} \sqrt{3} (\sqrt{5} - 1) - \frac{1}{8} I \sqrt{ -\left(\frac{1}{8} \sqrt{2} \sqrt{5 + \sqrt{5}} - \frac{1}{8} \sqrt{3} (\sqrt{5} - 1) \right)^2 + 1 } \right) \left(\frac{1}{3} \right) \right)$
78	$-\frac{1}{8} + \frac{1}{8} \sqrt{5} + \frac{1}{8} \sqrt{2} \sqrt{3} \sqrt{5 + \sqrt{5}}$
79	$\frac{1}{2} \operatorname{sqr} \left(2 - 2 \left(-\frac{1}{2} + \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{64} \sqrt{3} (1 + \sqrt{5}) + \frac{1}{128} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} + \frac{1}{8} I \sqrt{ -\left(\frac{1}{8} \sqrt{3} (1 + \sqrt{5}) - \frac{1}{16} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} \right)^2 + 1 } \right) \left(\frac{1}{3} \right) \right. \\ \left. - 2 \left(-\frac{1}{2} - \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{64} \sqrt{3} (1 + \sqrt{5}) + \frac{1}{128} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} - \frac{1}{8} I \sqrt{ -\left(\frac{1}{8} \sqrt{3} (1 + \sqrt{5}) - \frac{1}{16} \sqrt{2} (\sqrt{5} - 1) \sqrt{5 + \sqrt{5}} \right)^2 + 1 } \right) \left(\frac{1}{3} \right) \right)$
80	$\left(-\frac{1}{2} + \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{16} \sqrt{3} + \frac{1}{16} I \right) \left(\frac{1}{3} \right) - \left(-\frac{1}{2} - \frac{1}{2} I \sqrt{3} \right) \left(-\frac{1}{16} \sqrt{3} - \frac{1}{16} I \right) \left(\frac{1}{3} \right)$
81	$-\frac{1}{8} \sqrt{5 + \sqrt{5}} + \frac{1}{8} \sqrt{5} \sqrt{5 + \sqrt{5}} + \frac{1}{8} \sqrt{2} \sqrt{5} + \frac{1}{8} \sqrt{2}$

82	$\left(-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\right)\left(\frac{1}{3}\right)$ $-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\right)\left(\frac{1}{3}\right)\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)$ $\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $+\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{64}+\frac{1}{64}\sqrt{5}-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{6}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}-\frac{1}{8}\sqrt{5}\right)^2+1}\right)\left(\frac{1}{3}\right)\right)$
83	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{2}\sqrt{5}+\frac{1}{128}\sqrt{5}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{2}-\frac{1}{128}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{2}\sqrt{5}\sqrt{3}-\frac{1}{128}\sqrt{2}\sqrt{3}\right.$ $\left.+\frac{1}{128}\sqrt{5+\sqrt{5}}\sqrt{3}\right)$ $+\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}\sqrt{5}-\frac{1}{16}\sqrt{5}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}+\frac{1}{16}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}+\frac{1}{16}\sqrt{2}\sqrt{3}-\frac{1}{16}\sqrt{5+\sqrt{5}}\sqrt{3}\right)^2+1}\left(\frac{1}{3}\right)-$ $\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{128}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{2}\sqrt{5}+\frac{1}{128}\sqrt{5}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{2}-\frac{1}{128}\sqrt{5+\sqrt{5}}-\frac{1}{128}\sqrt{2}\sqrt{5}\sqrt{3}-\frac{1}{128}\sqrt{2}\sqrt{3}+\frac{1}{128}\sqrt{5+\sqrt{5}}\sqrt{3}\right.$ $\left.-\frac{1}{8}I\sqrt{-\left(\frac{1}{16}\sqrt{5}\sqrt{3}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}\sqrt{5}-\frac{1}{16}\sqrt{5}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}+\frac{1}{16}\sqrt{5+\sqrt{5}}+\frac{1}{16}\sqrt{2}\sqrt{5}\sqrt{3}+\frac{1}{16}\sqrt{2}\sqrt{3}-\frac{1}{16}\sqrt{5+\sqrt{5}}\sqrt{3}\right)^2+1}\right)\left(\frac{1}{3}\right)$
84	$\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}$
85	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{32}\sqrt{6}\left(1+\frac{1}{3}\sqrt{3}\right)+\frac{1}{32}I\sqrt{-6\left(1+\frac{1}{3}\sqrt{3}\right)^2+16}\right)\left(\frac{1}{3}\right)-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{32}\sqrt{6}\left(1+\frac{1}{3}\sqrt{3}\right)-\frac{1}{32}I\sqrt{-6\left(1+\frac{1}{3}\sqrt{3}\right)^2+16}\right)\left(\frac{1}{3}\right)$
86	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(\frac{1}{64}-\frac{1}{64}\sqrt{5}-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}+\frac{1}{8}I\sqrt{-\left(-\frac{1}{8}+\frac{1}{8}\sqrt{5}+\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(\frac{1}{64}-\frac{1}{64}\sqrt{5}-\frac{1}{64}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}-\frac{1}{8}I\sqrt{-\left(-\frac{1}{8}+\frac{1}{8}\sqrt{5}+\frac{1}{8}\sqrt{2}\sqrt{5+\sqrt{5}}\sqrt{3}\right)^2+1}\right)\left(\frac{1}{3}\right)$
87	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(\frac{1}{64}\sqrt{5+\sqrt{5}}-\frac{1}{64}\sqrt{5}\sqrt{5+\sqrt{5}}-\frac{1}{64}\sqrt{2}\sqrt{5}-\frac{1}{64}\sqrt{2}+\frac{1}{8}I\sqrt{-\left(-\frac{1}{8}\sqrt{5+\sqrt{5}}+\frac{1}{8}\sqrt{5}\sqrt{5+\sqrt{5}}+\frac{1}{8}\sqrt{2}\sqrt{5}+\frac{1}{8}\sqrt{2}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(\frac{1}{64}\sqrt{5+\sqrt{5}}-\frac{1}{64}\sqrt{5}\sqrt{5+\sqrt{5}}-\frac{1}{64}\sqrt{2}\sqrt{5}-\frac{1}{64}\sqrt{2}-\frac{1}{8}I\sqrt{-\left(-\frac{1}{8}\sqrt{5+\sqrt{5}}+\frac{1}{8}\sqrt{5}\sqrt{5+\sqrt{5}}+\frac{1}{8}\sqrt{2}\sqrt{5}+\frac{1}{8}\sqrt{2}\right)^2+1}\right)\left(\frac{1}{3}\right)$
88	$-\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$ $-\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
89	$\frac{1}{2}\sqrt{2-2\left(-\frac{1}{2}+\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}+\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)}$ $-2\left(-\frac{1}{2}-\frac{1}{2}I\sqrt{3}\right)\left(-\frac{1}{64}\sqrt{3}(1+\sqrt{5})-\frac{1}{128}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}-\frac{1}{8}I\sqrt{-\left(\frac{1}{8}\sqrt{3}(1+\sqrt{5})+\frac{1}{16}\sqrt{2}(\sqrt{5}-1)\sqrt{5+\sqrt{5}}\right)^2+1}\right)\left(\frac{1}{3}\right)$
90	1
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