## Complete Graphs -1 round

4v0

$$e^{(0.-6.i)\gamma} \left( \sin^4(\beta) + \cos^4(\beta) \right) - 6e^{(0.+2.i)\gamma} \sin^2(\beta) \cos^2(\beta) + (1.+0.i) \left( 4i \sin(\beta) \cos^3(\beta) - 4i \sin^3(\beta) \cos(\beta) \right)$$

$$p = 0.7463862450716419$$

4v1

$$e^{(0.-6.i)\gamma} \left( i \sin(\beta) \cos^3(\beta) - i \sin^3(\beta) \cos(\beta) \right) + e^{(0.+2.i)\gamma} \left( 3i \sin(\beta) \cos^3(\beta) - 3i \sin^3(\beta) \cos(\beta) \right) + (1. + 0.i) \left( \sin^4(\beta) + \cos^4(\beta) - 6 \sin^2(\beta) \cos^2(\beta) \right)$$

5v1

$$e^{(0.-10.i)\gamma} \left( \sin^4(\beta) \cos(\beta) + i \sin(\beta) \cos^4(\beta) \right) + e^{(0.-2.i)\gamma} \left( i \sin^5(\beta) + \cos^5(\beta) - 4 \sin^2(\beta) \cos^3(\beta) - 4i \sin^3(\beta) \cos^2(\beta) \right) + e^{(0.+2.i)\gamma} \left( 4i \sin(\beta) \cos^4(\beta) - 6 \sin^2(\beta) \cos^3(\beta) - 6i \sin^3(\beta) \cos^2(\beta) + 4 \sin^4(\beta) \cos(\beta) \right)$$

p = 0.9027829703323855

5v2

$$e^{(0.-10.i)\gamma} \left( -\sin^2(\beta)\cos^3(\beta) - i\sin^3(\beta)\cos^2(\beta) \right) + e^{(0.-2.i)\gamma} \left( 2i\sin(\beta)\cos^4(\beta) - 3\sin^2(\beta)\cos^3(\beta) - 3i\sin^3(\beta)\cos^2(\beta) + 2\sin^4(\beta)\cos(\beta) \right) + e^{(0.+2.i)\gamma} \left( i\sin^5(\beta) + \cos^5(\beta) + 3i\sin(\beta)\cos^4(\beta) - 6\sin^2(\beta)\cos^3(\beta) - 6i\sin^3(\beta)\cos^2(\beta) + 3\sin^4(\beta)\cos(\beta) \right)$$

p = 0.9812601126931485

6v1

$$e^{(0.-15.i)\gamma} \left( i\sin(\beta)\cos^{5}(\beta) + i\sin^{5}(\beta)\cos(\beta) \right) \\ + e^{(0.+1.i)\gamma} \left( 5i\sin(\beta)\cos^{5}(\beta) - 20i\sin^{3}(\beta)\cos^{3}(\beta) + 5i\sin^{5}(\beta)\cos(\beta) \right) \\ + e^{(0.+3.i)\gamma} \left( 10\sin^{4}(\beta)\cos^{2}(\beta) - 10\sin^{2}(\beta)\cos^{4}(\beta) \right) \\ + e^{(0.-5.i)\gamma} \left( -\sin^{6}(\beta) + \cos^{6}(\beta) - 5\sin^{2}(\beta)\cos^{4}(\beta) + 5\sin^{4}(\beta)\cos^{2}(\beta) \right)$$

p = 0.6977792071058941

6v2

$$e^{(0.-5.i)\gamma} \left( 2i\sin(\beta)\cos^{5}(\beta) - 8i\sin^{3}(\beta)\cos^{3}(\beta) + 2i\sin^{5}(\beta)\cos(\beta) \right) + e^{(0.+3.i)\gamma} \left( 4i\sin(\beta)\cos^{5}(\beta) - 12i\sin^{3}(\beta)\cos^{3}(\beta) + 4i\sin^{5}(\beta)\cos(\beta) \right) + e^{(0.-15.i)\gamma} \left( \sin^{4}(\beta)\cos^{2}(\beta) - \sin^{2}(\beta)\cos^{4}(\beta) \right) + e^{(0.+1.i)\gamma} \left( -\sin^{6}(\beta) + \cos^{6}(\beta) - 14\sin^{2}(\beta)\cos^{4}(\beta) + 14\sin^{4}(\beta)\cos^{2}(\beta) \right)$$

p = 0.9374999999999998

6v3

$$-2ie^{(0.-15.i)\gamma}\sin^{3}(\beta)\cos^{3}(\beta) + e^{(0.+1.i)\gamma}\left(6i\sin(\beta)\cos^{5}(\beta) - 18i\sin^{3}(\beta)\cos^{3}(\beta) + 6i\sin^{5}(\beta)\cos(\beta)\right) + e^{(0.-5.i)\gamma}\left(6\sin^{4}(\beta)\cos^{2}(\beta) - 6\sin^{2}(\beta)\cos^{4}(\beta)\right) + e^{(0.+3.i)\gamma}\left(-\sin^{6}(\beta) + \cos^{6}(\beta) - 9\sin^{2}(\beta)\cos^{4}(\beta) + 9\sin^{4}(\beta)\cos^{2}(\beta)\right)$$

p = 0.7898554196671116