

Lines – 1 round

4v4

$$\begin{aligned} & e^{-3i\gamma} (\sin^4(\beta) + \cos^4(\beta)) - 2e^{3i\gamma} \sin^2(\beta) \cos^2(\beta) \\ & + e^{-i\gamma} (2i \sin(\beta) \cos^3(\beta) - 2 \sin^2(\beta) \cos^2(\beta) - 2i \sin^3(\beta) \cos(\beta)) \\ & + e^{i\gamma} (2i \sin(\beta) \cos^3(\beta) - 2 \sin^2(\beta) \cos^2(\beta) - 2i \sin^3(\beta) \cos(\beta)) \end{aligned}$$

$$p = 0.46304480643500107$$

4v3 1

$$\begin{aligned} & e^{-3i\gamma} (i \sin(\beta) \cos^3(\beta) - i \sin^3(\beta) \cos(\beta)) + e^{3i\gamma} (i \sin(\beta) \cos^3(\beta) - i \sin^3(\beta) \cos(\beta)) \\ & + e^{i\gamma} (i \sin(\beta) \cos^3(\beta) - 4 \sin^2(\beta) \cos^2(\beta) - i \sin^3(\beta) \cos(\beta)) \\ & + e^{-i\gamma} (\sin^4(\beta) + \cos^4(\beta) + i \sin(\beta) \cos^3(\beta) - 2 \sin^2(\beta) \cos^2(\beta) - i \sin^3(\beta) \cos(\beta)) \end{aligned}$$

$$p = 0.36126578875056486$$

4v2 1 1

$$\begin{aligned} & e^{-3i\gamma} (i \sin(\beta) \cos^3(\beta) - i \sin^3(\beta) \cos(\beta)) + e^{3i\gamma} (i \sin(\beta) \cos^3(\beta) - i \sin^3(\beta) \cos(\beta)) \\ & + e^{-i\gamma} (i \sin(\beta) \cos^3(\beta) - 4 \sin^2(\beta) \cos^2(\beta) - i \sin^3(\beta) \cos(\beta)) \\ & + e^{i\gamma} (\sin^4(\beta) + \cos^4(\beta) + i \sin(\beta) \cos^3(\beta) - 2 \sin^2(\beta) \cos^2(\beta) - i \sin^3(\beta) \cos(\beta)) \end{aligned}$$

$$p = 0.3612657887505645$$

4v2 2

$$\begin{aligned} & -2e^{-3i\gamma} \sin^2(\beta) \cos^2(\beta) - 2e^{3i\gamma} \sin^2(\beta) \cos^2(\beta) \\ & + e^{-i\gamma} (\sin^4(\beta) + \cos^4(\beta) + 2i \sin(\beta) \cos^3(\beta) - 2i \sin^3(\beta) \cos(\beta)) \\ & + e^{i\gamma} (2i \sin(\beta) \cos^3(\beta) - 2 \sin^2(\beta) \cos^2(\beta) - 2i \sin^3(\beta) \cos(\beta)) \end{aligned}$$

$$p = 0.321339375126532$$

4v1 1 1 1

$$\begin{aligned} & e^{3i\gamma} (\sin^4(\beta) + \cos^4(\beta)) - 2e^{-3i\gamma} \sin^2(\beta) \cos^2(\beta) \\ & + e^{-i\gamma} (2i \sin(\beta) \cos^3(\beta) - 2 \sin^2(\beta) \cos^2(\beta) - 2i \sin^3(\beta) \cos(\beta)) \\ & + e^{i\gamma} (2i \sin(\beta) \cos^3(\beta) - 2 \sin^2(\beta) \cos^2(\beta) - 2i \sin^3(\beta) \cos(\beta)) \end{aligned}$$

$$p = 0.4630448064350012$$

4v1 2 1

$$\begin{aligned} & -2e^{-3i\gamma} \sin^2(\beta) \cos^2(\beta) - 2e^{3i\gamma} \sin^2(\beta) \cos^2(\beta) \\ & + e^{i\gamma} (\sin^4(\beta) + \cos^4(\beta) + 2i \sin(\beta) \cos^3(\beta) - 2i \sin^3(\beta) \cos(\beta)) \\ & + e^{-i\gamma} (2i \sin(\beta) \cos^3(\beta) - 2 \sin^2(\beta) \cos^2(\beta) - 2i \sin^3(\beta) \cos(\beta)) \end{aligned}$$

$$p = 0.321339375126532$$