



Problems and Answers.

Answers

Solve the problem #1
Calculate the following sum:

$$\cos^2\left(\frac{5\pi}{4}\right) + \sin^2\left(\frac{7\pi}{4}\right) + \operatorname{tg}^2\left(\frac{\pi}{6}\right) + \operatorname{ctg}^2\left(\frac{5\pi}{4}\right) = \underline{\hspace{2cm}}$$

Solve the problem #2
Calculate the following sum:

$$\cos^2\left(\frac{2\pi}{3}\right) + \sin^2\left(\frac{7\pi}{6}\right) + \operatorname{tg}^2\left(\frac{7\pi}{4}\right) + \operatorname{ctg}^2\left(\frac{\pi}{6}\right) = \underline{\hspace{2cm}}$$

Solve the problem #3
Calculate the following sum:

$$\cos^2\left(\frac{5\pi}{6}\right) + \sin^2\left(\frac{8\pi}{3}\right) + \operatorname{tg}^2\left(\frac{2\pi}{3}\right) + \operatorname{ctg}^2\left(\frac{7\pi}{6}\right) = \underline{\hspace{2cm}}$$

Solve the problem #4
Calculate the following sum:

$$\cos^2\left(\frac{2\pi}{3}\right) + \sin^2\left(\frac{7\pi}{6}\right) + \operatorname{tg}^2\left(\frac{8\pi}{3}\right) + \operatorname{ctg}^2\left(\frac{\pi}{4}\right) = \underline{\hspace{2cm}}$$

Solve the problem #5
Calculate the following sum:

$$\cos^2\left(\frac{3\pi}{4}\right) + \sin^2\left(\frac{5\pi}{3}\right) + \operatorname{tg}^2\left(\frac{8\pi}{3}\right) + \operatorname{ctg}^2\left(\frac{\pi}{3}\right) = \underline{\hspace{2cm}}$$

Solve the problem #6
Calculate the following sum:

$$\cos^2\left(\frac{9\pi}{4}\right) + \sin^2\left(\frac{2\pi}{3}\right) + \operatorname{tg}^2\left(\frac{7\pi}{4}\right) + \operatorname{ctg}^2\left(\frac{7\pi}{3}\right) = \underline{\hspace{2cm}}$$

Solve the problem #7
Calculate the following sum:

$$\cos^2\left(\frac{8\pi}{3}\right) + \sin^2\left(\frac{\pi}{6}\right) + \operatorname{tg}^2\left(\frac{5\pi}{4}\right) + \operatorname{ctg}^2\left(\frac{5\pi}{3}\right) = \underline{\hspace{2cm}}$$

Solve the problem #8
Calculate the following sum:

$$\cos^2\left(\frac{5\pi}{6}\right) + \sin^2\left(\frac{7\pi}{3}\right) + \operatorname{tg}^2\left(\frac{\pi}{4}\right) + \operatorname{ctg}^2\left(\frac{7\pi}{6}\right) = \underline{\hspace{2cm}}$$



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Solve the problem #1

Calculate the following sum:

$$\cos^2\left(\frac{5\pi}{4}\right) + \sin^2\left(\frac{7\pi}{4}\right) + \operatorname{tg}^2\left(\frac{\pi}{6}\right) + \operatorname{ctg}^2\left(\frac{5\pi}{4}\right) = \frac{7}{3}$$

Solve the problem #2

Calculate the following sum:

$$\cos^2\left(\frac{2\pi}{3}\right) + \sin^2\left(\frac{7\pi}{6}\right) + \operatorname{tg}^2\left(\frac{7\pi}{4}\right) + \operatorname{ctg}^2\left(\frac{\pi}{6}\right) = \frac{9}{2}$$

Solve the problem #3

Calculate the following sum:

$$\cos^2\left(\frac{5\pi}{6}\right) + \sin^2\left(\frac{8\pi}{3}\right) + \operatorname{tg}^2\left(\frac{2\pi}{3}\right) + \operatorname{ctg}^2\left(\frac{7\pi}{6}\right) = \frac{15}{2}$$

Solve the problem #4

Calculate the following sum:

$$\cos^2\left(\frac{2\pi}{3}\right) + \sin^2\left(\frac{7\pi}{6}\right) + \operatorname{tg}^2\left(\frac{8\pi}{3}\right) + \operatorname{ctg}^2\left(\frac{\pi}{4}\right) = \frac{9}{2}$$

Solve the problem #5

Calculate the following sum:

$$\cos^2\left(\frac{3\pi}{4}\right) + \sin^2\left(\frac{5\pi}{3}\right) + \operatorname{tg}^2\left(\frac{8\pi}{3}\right) + \operatorname{ctg}^2\left(\frac{\pi}{3}\right) = \frac{55}{12}$$

Solve the problem #6

Calculate the following sum:

$$\cos^2\left(\frac{9\pi}{4}\right) + \sin^2\left(\frac{2\pi}{3}\right) + \operatorname{tg}^2\left(\frac{7\pi}{4}\right) + \operatorname{ctg}^2\left(\frac{7\pi}{3}\right) = \frac{31}{12}$$

Solve the problem #7

Calculate the following sum:

$$\cos^2\left(\frac{8\pi}{3}\right) + \sin^2\left(\frac{\pi}{6}\right) + \operatorname{tg}^2\left(\frac{5\pi}{4}\right) + \operatorname{ctg}^2\left(\frac{5\pi}{3}\right) = \frac{11}{6}$$

Solve the problem #8

Calculate the following sum:

$$\cos^2\left(\frac{5\pi}{6}\right) + \sin^2\left(\frac{7\pi}{3}\right) + \operatorname{tg}^2\left(\frac{\pi}{4}\right) + \operatorname{ctg}^2\left(\frac{7\pi}{6}\right) = \frac{11}{2}$$

Answer keys

Answers