

Answer on Question #48678 – Math – Trigonometry

Write the expression as either the sine, cosine, or tangent of a single angle.

cosine of pi divided by three times cosine of pi divided by five plus sine of pi divided by three times sine of pi divided by five.

Solution.

$$\cos \frac{\pi}{3} \cdot \cos \frac{\pi}{5} + \sin \frac{\pi}{3} \cdot \sin \frac{\pi}{5} = \cos \left(\frac{\pi}{3} - \frac{\pi}{5} \right) = \cos \frac{5\pi - 3\pi}{15} = \cos \frac{2\pi}{15}.$$

Answer: $\cos \frac{2\pi}{15}.$