

$$\frac{2.05}{25}$$

$$\frac{3}{5} = \sin\left(\frac{\sqrt{4}}{2} - x\right) = \sin\left(\frac{1}{2} - x\right) = \cos x$$

$$\sin \frac{x}{2} \sin \frac{5x}{2} = \frac{1}{2} \left[ \cancel{\cos 2x} - \cos 3x \right] = \frac{1}{2} \left[ 2\cos^2 x - 4\cos^3 x + 3\cos x \right] =$$

$$\begin{aligned} \cos 3x &= \cos(2x+x) = \cos 2x \cos x - \sin 2x \sin x \\ &= (2\cos^2 x - 1)\cos x - 2\sin^2 x \cos x \\ &= 2\cos^3 x - \cos x - 2\cos x(1 - \cos^2 x) \\ &= 4\cos^3 x - 3\cos x \end{aligned}$$

$$= \frac{1}{2} \left[ 2 \cdot \frac{9}{25} - 1 - 4 \cdot \frac{27}{125} + \frac{9}{5} \right] = \frac{1}{2} \cdot \left[ \frac{90 - 125 - 108 + 225}{125} \right] = \frac{41}{125}$$