

$$5. \cos(3\theta) = \frac{\sqrt{2}}{2}$$

$$\textcircled{1} \cos \frac{\pi}{4} = \frac{\sqrt{2}}{2}$$

$$3\theta = \frac{\pi}{4}$$

$$\frac{1}{3} \cdot 3\theta = \frac{1}{3} \cdot \frac{\pi}{4}$$

$$\theta = \frac{\pi}{12}$$

$$\textcircled{2} \cos \frac{7\pi}{4} = \frac{\sqrt{2}}{2}$$

$$3\theta = \frac{7\pi}{4}$$

$$\theta = \frac{7\pi}{12}$$

$$\textcircled{3} \cos \frac{9\pi}{4} = \frac{\sqrt{2}}{2}$$

$$3\theta = \frac{9\pi}{4}$$

$$\theta = \frac{9\pi}{12}$$

$$\theta = \frac{3\pi}{4}$$

$$\textcircled{4} \cos \frac{15\pi}{4} = \frac{\sqrt{2}}{2}$$

$$3\theta = \frac{15\pi}{4}$$

$$\theta = \frac{15\pi}{12}$$

$$\theta = \frac{5\pi}{4}$$

$$\textcircled{5} \cos \frac{17\pi}{4} = \frac{\sqrt{2}}{2}$$

$$3\theta = \frac{17\pi}{4}$$

$$\theta = \frac{17\pi}{12}$$

$$\theta = \frac{17\pi}{12}$$

$$\textcircled{6} \cos \frac{23\pi}{4} = \frac{\sqrt{2}}{2}$$

$$3\theta = \frac{23\pi}{4}$$

$$\theta = \frac{23\pi}{12}$$

$$\theta = \frac{23\pi}{12}$$

$$\textcircled{7} \frac{\pi}{4} + 6\pi$$

$$\cos \frac{25\pi}{4} = \frac{\sqrt{2}}{2}$$

$$3\theta = \frac{25\pi}{4}$$

$$\theta = \frac{25\pi}{12}$$

$$= 2\frac{1}{12}\pi$$

$$6. \sin\left(\frac{A}{5} - \frac{\pi}{2}\right) = -\frac{\sqrt{3}}{2}$$

$$\textcircled{1} \sin \frac{4\pi}{3} = -\frac{\sqrt{3}}{2}$$

$$\textcircled{2} \sin \frac{5\pi}{3} = -\frac{\sqrt{3}}{2}$$

$$\frac{A}{5} - \frac{\pi}{2} = \frac{4\pi}{3}$$

$$\frac{6}{6} \left(\frac{A}{5}\right) - \frac{15}{6} \left(\frac{\pi}{2}\right) = \frac{10}{6} \left(\frac{4\pi}{3}\right)$$

$$6A - 15\pi = 40\pi$$

$$6A = 40\pi + 15\pi$$

$$6A = 55\pi$$

$$\frac{6A}{6} = \frac{55\pi}{6}$$

$$\theta = \frac{55\pi}{6}$$

NO SOL.