

Unit 8 Objective 9

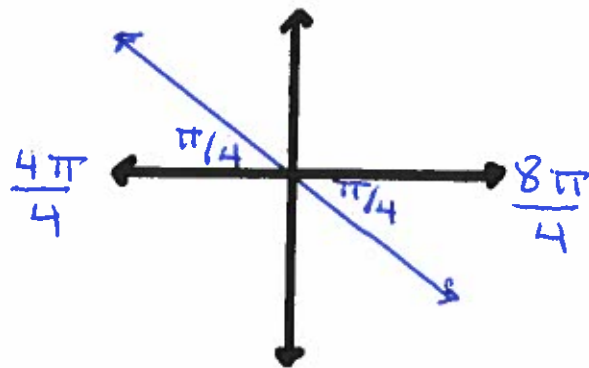
$$5 \tan \theta + 5 = 0$$

$$\frac{5 \tan \theta}{5} = \frac{-5}{5}$$

$$\tan \theta = -1$$

$$\text{ref} = \frac{\pi}{4} \quad \text{Q's 2 and 4}$$

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



$$2 \cos^2 \theta - 1 = 0$$

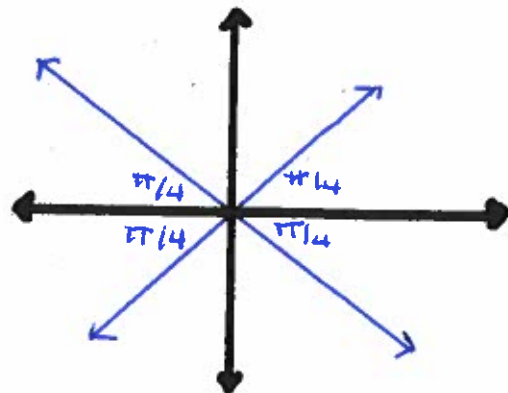
$$2 \cos^2 \theta = 1$$

$$\cos^2 \theta = \frac{1}{2}$$

$$\cos \theta = \pm \frac{1}{\sqrt{2}}$$

$$\text{ref} = \frac{\pi}{4} \quad \text{All 4 Q's}$$

$$\theta = \frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4}$$



$$3 \tan^2 \theta - 1 = 0$$

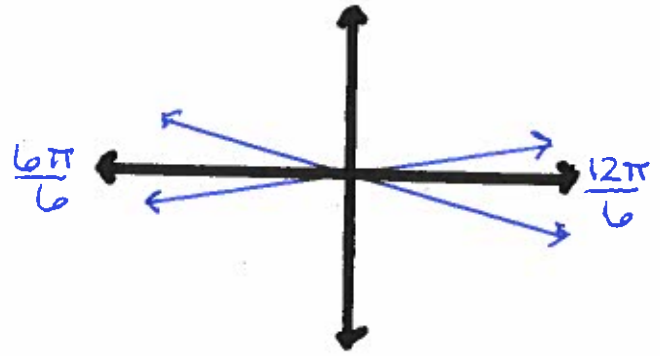
$$3 \tan^2 \theta = 1$$

$$\tan^2 \theta = \frac{1}{3}$$

$$\tan \theta = \pm \frac{1}{\sqrt{3}}$$

$$\text{ref} = \frac{\pi}{6} \quad \text{All 4 Q's}$$

$$\theta = \frac{\pi}{6}, \frac{5\pi}{6}, \frac{7\pi}{6}, \frac{11\pi}{6}$$



$$2 \cos \theta + 1 = 0$$

$$2 \cos \theta = -1$$

$$\cos \theta = -\frac{1}{2}$$

$$\text{ref} = \frac{\pi}{3}$$

$$\theta = \frac{2\pi}{3} \text{ and } \frac{4\pi}{3}$$

