

Solve each trigonometric equation for  $\theta$  on the interval  $[0, 2\pi]$ .

$$\csc \theta = -2$$

$$\cot \theta = \frac{\sqrt{3}}{3}$$

$$\tan 5\theta = 1$$

$$\cos \left( \frac{\theta}{3} + \frac{\pi}{9} \right) = \frac{1}{2}$$