

Warm-up #2:
Solving Equations & Unit Circle

Solve:

1. $100n^2 - 9 = 27$

$$\frac{100n^2}{100} = \frac{36}{100}$$

$$\sqrt{n^2} = \sqrt{\frac{9}{25}}$$

$$n = \pm \frac{3}{5}$$

2. $p^2 + 10p = -16$

$$p^2 + 10p + 16 = 0$$

$$(p + 8)(p + 2) = 0$$

$$p = -8, -2$$

Find theta in terms of radians: $[0, 2\pi)$

3. $\sin\theta = \frac{-1}{2}$

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

4. $\cot\theta = \sqrt{3}$

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