Warm-up #2:
Solving Equations & Unit Circle

Solve:

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

$100n^2 = 36$

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

$n = \pm\frac{6}{10} = \boxed{\pm\frac{3}{5}}$

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

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

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

$p+8=0 \quad p+2=0$

$\boxed{p=-8} \quad \boxed{p=-2}$

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

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

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

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

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