PRECAL TOPICS Name_____

Solving Trig Equations #3

Date_____ Period____

Solve each equation for $0 \le \theta < 2\pi$.

1) $-2 - 6\cos\theta = 3\sqrt{2} - 2$

2) $-2\sqrt{2} - 3 = -3 - 2\sec\theta$

3) $2\sqrt{2} + 4 - \csc\theta = 4 - 3\csc\theta$

4) $-3 - 3\csc\theta = -2 - 2\csc\theta$

Solve each equation for $0 \le \theta < 360$.

5) $3\sqrt{3} + 5 = 5 - 9\tan(\theta + 45)$

6) $-3 - \frac{1}{3} \cdot \sin 3\theta = \frac{-9 - \sqrt{3}}{3} - \sin 3\theta$

7) $2 - 3\sin(-4\theta + 180) = 2 - 2\sin(-4\theta + 180)$

8) $2 + \frac{5}{2} \cdot \sin\left(330 + \frac{\theta}{2}\right) = \frac{9}{4} + 3\sin\left(330 + \frac{\theta}{2}\right)$