PRECAL TOPICS Name_____

Solving Trig Equations WS #1

Date_____ Period____

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

1) $\sec \theta = 1$

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

3) $2 + \cos \theta = 1$

4) $0 = -4\cot \theta$

5) $-5 - \frac{1}{3} \cdot \cot \theta = -5$

6) $2 + \frac{1}{2} \cdot \tan \theta = \frac{4 - \sqrt{3}}{2}$

7) $-2 + 2\tan\theta = 1 - \tan\theta$

8) $1 - 12\cot\theta = 4\sqrt{3} + 1$

9) $7 - 3\sin\theta = 3\sqrt{3} + 7$

10) $5 - 4\tan\theta = -2\sqrt{3} + 5 + 2\tan\theta$

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

11) $-5\sin\theta = -1 - 3\sin\theta$

12) $3 + \frac{5}{3} \cdot \sin\theta = \frac{10}{3} + \sin\theta$

13) $-2 + 6\sec\theta = -4\sqrt{3} - 2$

14) $-8\sqrt{3} - 3 = -3 + 12\sec\theta$

15) $-5 - 11\cot\theta = 3\sqrt{3} - 5 - 2\cot\theta$

16) $-4\sqrt{2} - 5 - \cos\theta = -5 - 9\cos\theta$