

Solving Trig Equations WS #2

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

1) $-1 = 5 - 3\csc \theta$

2) $7 = 5 - 4\sin \theta$

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

4) $2\sqrt{2} - 5 = -5 - 4\sin \theta$

$$5) \sqrt{2} + 2 = 2 + \sec \theta$$

$$6) 5 - 2\csc \theta = 3 - \csc \theta$$

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

$$7) -4\sqrt{2} - 3 = -3 - 8\sin(\theta + 30)$$

$$8) 5 - 3\cos -3\theta = 5 + \cos -3\theta$$

$$9) -3 + \tan(2\theta + 300) = -5 + 3\tan(2\theta + 300)$$

$$10) -5 + 10\sin(-3\theta + 45) = -9 + 2\sin(-3\theta + 45)$$