

Chapter 6 Pretest

1. Find *all* radian solutions for x .

a) $\sec x = -2$

b) $\cot x = \sqrt{3}$

2. Find *all* degree solutions for θ .

a) $\csc \theta = \sqrt{2}$

b) $\tan \theta = -1$

3. Solve the equation for $0 \leq x < 2\pi$.

a) $2 \cos^2 x - 1 = 0$

b) $\csc^2 x + 3 \csc x + 2 = 0$

4. Solve the equation for $0^\circ \leq \theta < 360^\circ$.

a) $\sin(2\theta) = -\sin \theta$

b) $2 \cos^2 \theta + 5 \sin \theta + 1 = 0$

5. Solve the equation for $0^\circ \leq \theta < 360^\circ$.

$$\sqrt{3} \cot(2\theta) - 1 = 0$$

6. Solve the equation for $0 \leq x < 2\pi$.

$$\tan\left(\frac{2}{3}x\right) - 1 = 0$$

7. Find *all* degree solutions for θ .

$$\csc(3\theta) - 1 = 0$$

8. Find *all* radian solutions for x .

$$2\cos(4x) + 1 = 0$$

9. Solve the equation for $0^\circ \leq \theta < 360^\circ$.

$$\tan(\theta + 80^\circ) = \sqrt{3}$$

10. Solve the equation for $0 \leq x < 2\pi$.

$$\sec\left(x - \frac{\pi}{3}\right) = \sqrt{2}$$