Solving Simple Trig Equations Practice Problems

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

1) $0 = \cos \theta$

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

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

4) $-1 = \cos \theta$

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

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

7) $1 = \sec \theta$

8) $-\sqrt{3} = \tan \theta$

9) $\sin \theta = \frac{1}{2}$

10) $\frac{\sqrt{2}}{2} = \sin \theta$

Answers to

1) $\left\{\frac{\pi}{2}, \frac{3\pi}{2}\right\}$

2) $\left\{\frac{5\pi}{4}, \frac{7\pi}{4}\right\}$

3) $\left\{\frac{5\pi}{4}, \frac{7\pi}{4}\right\}$

4) $\{\pi\}$

5) $\left\{\frac{\pi}{4}, \frac{7\pi}{4}\right\}$

6) $\left\{\frac{\pi}{6}, \frac{11\pi}{6}\right\}$

7) $\{0\}$

8) $\left\{\frac{2\pi}{3}, \frac{5\pi}{3}\right\}$

9) $\left\{\frac{\pi}{6}, \frac{5\pi}{6}\right\}$

10) $\left\{\frac{\pi}{4}, \frac{3\pi}{4}\right\}$