Solve the following trig equations, $0^o \le x < 360^o$

1. $1 - \sin x = 0$

Solve the following trig equations, $0 \le x < 2\pi$

2. $2\cos x - 1 = 0$
3. $\sqrt{3}\csc x - 2 = 0$
4. $\cos^2 x = \cos x$
5. $\sin 2x = \sin x$
6. $\cos^2 x + \frac{1}{2}\sin x - \frac{1}{2} = 0$
7. $3\cos 2x + 2\sin^2 x = 2$

Solve the following trig equations. Give ALL solutions.

8. $1 + \sin x = 0$
9. $\tan 3x = 1$
10. $\cos 2x = 1/2$

Answers

1. $90^o$
2. $\frac{\pi}{3}, \frac{5\pi}{3}$
3. $\frac{\pi}{3}, \frac{2\pi}{3}$
4. $0, \frac{\pi}{2}, \frac{3\pi}{2}$
5. $0, \frac{\pi}{3}, \pi, \frac{5\pi}{3}$
6. $\frac{\pi}{2}, \frac{7\pi}{6}, \frac{11\pi}{6}$
7. $\frac{\pi}{6}, \frac{5\pi}{6}, \frac{7\pi}{6}, \frac{11\pi}{6}$
8. $\frac{3\pi}{2} + 2n\pi$
9. $\frac{\pi}{12} + \frac{n\pi}{3}$
10. $\frac{\pi}{6} + n\pi, \frac{5\pi}{6} + n\pi$