

Find the general solution.

1.  $2 \cos(2x) - 1 = 0$

2.  $2 \sin(2x) = \sqrt{3} = 0$

3.  $\tan(3x) - 1 = 0$

4.  $\sec(4x) - 2 = 0$

5.  $2 \cos\left(\frac{x}{2}\right) - \sqrt{2} = 0$

6.  $3 \tan\left(\frac{x}{2}\right) - \sqrt{3} = 0$

Find all solutions on the interval  $[0, 2\pi)$ .

7.  $2 \sin(2x) - \sqrt{2} = 0$

8.  $2 \cos\left(\frac{x}{2}\right) + 1 = 0$

9.  $3 \tan^2\left(\frac{x}{3}\right) - 1 = 0$

10.  $\sqrt{3} \tan(3x) = 0$

11.  $3 \csc^2(5x) = -4$