

Name: \_\_\_\_\_

**Aim: Practice Solving Trigonometric Equations**

Practice: Solve for all values of  $x$  in the interval  $[0, 2\pi)$ . Round to the nearest tenth, if necessary.

1.  $2 + 3\sin x = \cos 2x$

2.  $\tan^2 x - 2\sec^2 x + 4 = 0$

3.  $\tan^2 x + 2 + 2\tan x - 7 = 0$

4.  $\cos 2x - \sin x = 1$

5.  $4\sin^2 x = 2\cos x + 1$

6.  $\sin x = \sin 2x$

7.  $5\sin x + 2\cos 2x - 3 = 0$

8.  $3\sec^2 x - 4 = 0$

9.  $\tan x = -2\sin x$

10.  $\cos 2x + 3\sin x = 2$

11.  $\cot^2 x - \csc x = 1$

12.  $3\sec x - \cos x - 2 = 0$