

HW# \_\_\_\_\_

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

## Trigonometric Equations Practice

Solve for all possible values of  $x$  in radians. Write solutions in exact form.

1) Hint: isolate  $\cos x$

$$\cos x + \sqrt{3} = -\cos x$$

2) Hint: isolate  $\sin^2 \theta$  and use square root

$$4 \sin^2 \theta - 3 = 0$$

3) Hint: move everything to one side and factor

$$2 \cos \theta \sin \theta = \cos \theta$$

4) Hint: isolate  $\sin \theta$

$$5(\sin \theta + 1) = 5$$

5)  $7 \tan \theta = 3\sqrt{3} + \tan \theta$

6)  $2 \sin \theta \cos \theta + \cos \theta = 0$

7)  $2 \cos \theta - 1 = 0$

8)  $4 \sin \theta - 1 = 2 \sin \theta + 1$