

Name \_\_\_\_\_  
Mr. Schlansky

Date \_\_\_\_\_  
Algebra II

## *First Degree Trig Equations*

For #1-6, solve for the variable in the interval  $0^\circ \leq \theta < 360^\circ$ :

1.  $2 \sin \theta + 1 = 0$

2.  $3 \cos \theta + 1 = 1$

3.  $2 \tan \theta + 2 = 0$

4.  $2 \sin \theta + \sqrt{3} = 0$

5.  $3 \cos x - \sqrt{3} = \cos x$

6.  $2(\sin x + 1) = \sin x + 3$

$$7. \sqrt{4\sin x + 7} = 3$$

$$8. \tan \theta - \sqrt{3} = 0$$

$$9. -\sqrt{2} \sec x = 2$$

$$10. \sec x - \sqrt{2} = 0$$

$$11. -\sqrt{3} \cot x = 1$$

$$12. -2\sec x = 4$$