

## 8-5 Solving More Difficult Trigonometric Equations

Objective: To use trigonometric identities to solve equations.

### Warm-up

Solve the equation.

1.  $x^2 = -3x + 4$       2.  $x^2 = x$       3.  $4x^2 - 7 = -6$

Solve for  $0^\circ \leq \theta < 360^\circ$  . Give answers to the nearest tenth of a degree.

1.  $8 \cos^2 \theta - 3 = 1$

2.  $\cos^2 \theta - 3 \sin \theta = 3$

Solve for  $0 \leq x < 2\pi$ . Give answers to the nearest hundredth of a radian.

3.  $\sec x \sin x = 2 \sin x$

4.  $\sin x - \cos x = 0$

5.  $3 \sin x = \cos x$