Name _____

# 2-6 Additional Practice

## The Quadratic Formula

**Use the Quadratic Formula to solve the equation. Show your work.**

**1.** $x^2 - 15x + 7 = 0$

**2.** $3x^2 + 2x + 1 = 0$

**Use two different methods to solve the equations. Show your work.**

**3.** $x^2 + 4x - 5 = 0$

**Use the discriminant to describe the solutions as one real, two real, or two imaginary solutions.**

**4.** $x^2 - 15x + 12 = 0$

**5.** $3x^2 - 6x + 4 = 0$

**6.** Find the value(s) of $k$ that will cause the equation $4x^2 + kx + 4$ to have zero real solutions, one real solution, or two real solutions.

**7.** Margaret runs a business. This year's revenue is given by the function $R = -0.5x^2 - 200x$. Can her revenue be at least $\$25{,}000$ this year?