NAME_____DATE_____PER._____

SOLVING QUADRATIC EQUATIONS
USING THE QUADRATIC FORMULA

The quadratic formula:

$$\text{If } ax^2 + bx + c = 0, \text{ then } x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Solve each equation using the quadratic formula. Round answers to the nearest tenth.

1. $x^2 + 5x + 3 = 0$ a = _____; b = _____; c = _____

2. $2x^2 - 7x + 1 = 0$ a = _____; b = _____; c = _____

3. $x^2 - x = 1$ a = _____; b = _____; c = _____

4. $x^2 - 5x - 24 = 0$ a = _____; b = _____; c = _____

5. $x^2 - x = 32$ a = _____; b = _____; c = _____

Solve by factoring.

6. $x^2 - 2x - 24 = 0$	7. $2x^2 = 32$	8. $x^2 - 8x = 65$

9. What is the equation of the line that has an undefined slope and passes through the point (4, -1)?

10. Find the equation in slope-intercept form for the line that is parallel to $y = -4x + 3$ and passes through the point (-2, 3).