## **Graphing Review**

Vertex Form	Intercept Form	Standard Form	Graph
		$f(x) = x^2 - 4x - 5$	8 † y
	*remember to factor out the GCF first	$f(x) = 2x^2 + 4x - 6$	8 1 y 6 - 4 - 2 0 2 4 6 8 - 2 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4

Use any method to solve. Explain why you chose the method that you chose.

1. 
$$x^2 + 8x = -15$$

2. 
$$3x^2 - 16x - 7 = 5$$

3. 
$$x^2 + 8x = 28$$

4. 
$$x^2 - 8 = -2x$$

$$5.4x^2 + 8x + 7 = 4$$

6. 
$$2x^2 - 7x - 13 = -10$$

- Suppose  $h(t) = -5t^2 + 10t + 3$  is the height of a diver above the water (in meters), t seconds after the diver leaves the springboard.
  - a. How high above the water is the springboard? Explain how you know.
  - b. When does the diver hit the water?
  - c. At what time on the diver's descent toward the water is the diver again at the same height as the springboard?
  - d. When does the diver reach the peak of the dive?