

Algebra 1 – Homework Day 2: Solving Quadratic Equations by Factoring

Name: _____

Solve the following quadratic equations by factoring. Show all work!!

1. $2x^2 + 13x + 15 = 0$

1. _____

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

2. _____

3. Explain how you would solve the equation in #2.

4. What is the **sum** of the solutions of $-6x - 8 = -5x^2$?

4. _____

5. The height (h), in feet, of a person jumping off a diving platform can be modeled by the equation $-12t^2 - 5t + 2$ where t represents the time in seconds the person is in the air. After how many seconds does the person jumping off the platform enter the water?

5. _____

a. $-\frac{2}{3}$ seconds

b. 4 seconds

c. $\frac{1}{4}$ seconds

d. $\frac{2}{3}$ seconds