

## Solving Quadratic Equations Worksheet:

- 1) Solve each equation by completely factoring the polynomial and applying the Zero Factor Property.  
No Decimal Answers.

$$81x^2 - 64 = 0$$

- 2) The height of a rectangular door is  $(x + 5)$  feet and its area is  $2x^2 + 13x + 15$  square feet. What is the length of the door?
- Write an algebraic equation to find the length.
  - Solve the equation.
  - Write a well-structured sentence with the units correctly stated.

- 3) Solve each equation by completely factoring the polynomial and applying the Zero Factor Property.  
No Decimal Answers.

$$2x^2 - 9x = 0$$

- 4) Solve each equation by completely factoring the polynomial and applying the Zero Factor Property.  
No Decimal Answers.

$$x^2 - 8x + 12 = 0$$

- 5) Solve each equation by completely factoring the polynomial and applying the Zero Factor Property.  
No Decimal Answers.

$$3x^2 - 10x - 8 = 0$$