

## Solving Quadratic Equations Using Concrete Models

Name:

Date:

### Vocabulary Review:

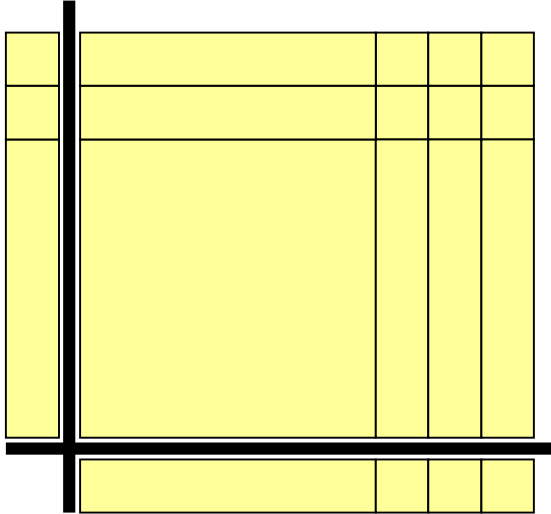
In your own words, define each of the following vocabulary terms.

- Quadratic Equation
  
- Zeros
  
- Constant

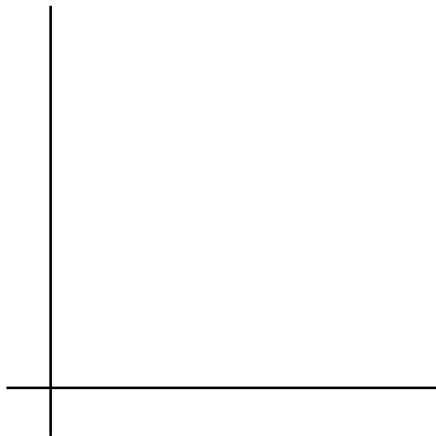
### Apply New Learning:

1. Explain how algebra tiles can be used to factor a quadratic equation. Then describe how the factors can be used to solve a quadratic equation.

2. What is product of  $(x + 2)(x + 3)$ ? The tile diagram is shown below.

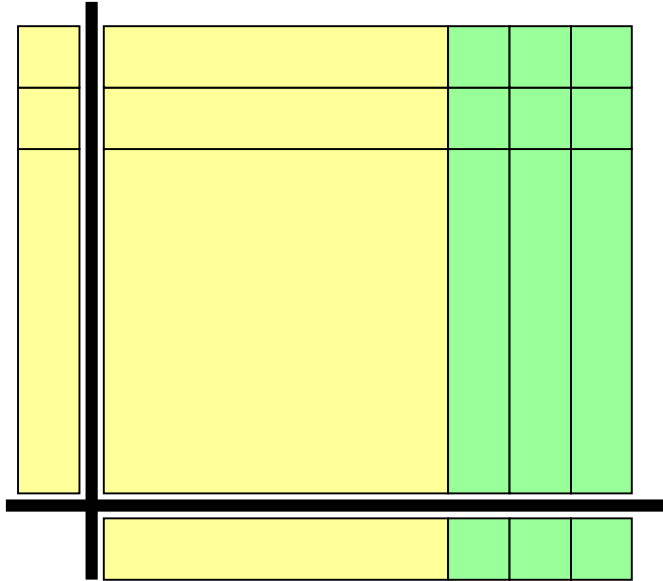


3. Use tiles to model the problem  $(3x - 2)(2x - 2)$ .



4. What is the product of  $(3x - 2)(2x - 2)$ ?

5. Factor  $x^2 - x - 6$ . The tile diagram is shown below.



6. Use the factors to write an equation.

7. Solve for  $x$ .