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 $x$. 