Completing the Square

Creating Perfect Square Expressions

Using Algebra Tiles

Consider the polynomial $x^2 + 2x + c$, where c is a constant. Which tile(s) are needed to make the expression a perfect square trinomial?

Completing the Square Algebraically

When given $x^2 + 2x + c$, where c, is the value needed to create a perfect square trinomial, the value of c can be determined by applying the formula _____. This strategy of creating a perfect square trinomial is called _____ _____ _____.

Practice: Complete the practice problem(s) in the space below. Be sure to check your work.

Completing the Square to Solve Equations

Steps to Solve by Completing the Square

Step 1:

Step 2:

Step 3:

Step 4:

Practice: Complete the practice problem(s) in the space below. Be sure to check your work.

Completing the Square with a Leading Coefficient

In order to complete the square, the quadratic expression must have a leading coefficient of ____

When the leading coefficient, *a*, is not equal to 1, one option is to _____ out *a*.

Practice: Complete the practice problem(s) in the space below. Be sure to check your work.

Please use additional paper as needed to complete the Self-Check. You may also choose to print the lesson's Sum It Up page.