

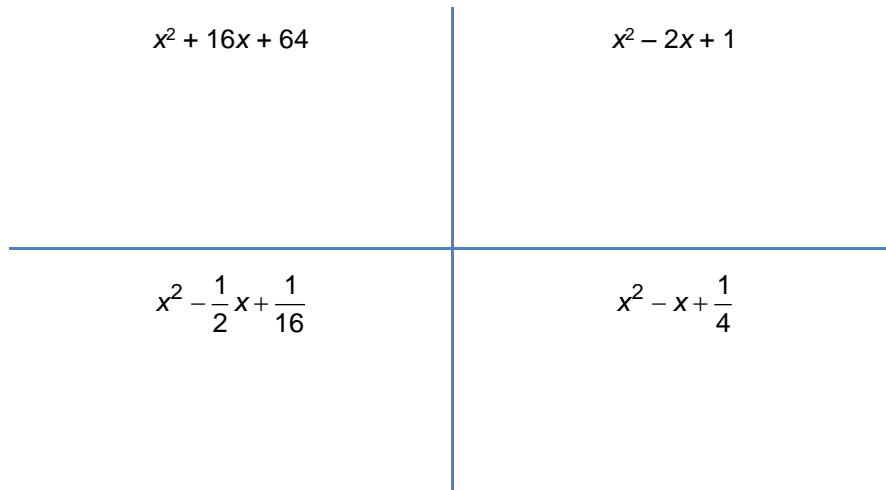
Complete each problem.

1. The completing the square method can be used to solve any quadratic equation.

- true  
 false

2. Write each expression below its matching perfect square trinomial.

$(x + 8)^2$	$(x - 1)^2$	$\left(x - \frac{1}{2}\right)^2$	$\left(x - \frac{1}{4}\right)^2$
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3. Find the value of  $c$  that completes the square for the expression.

$$x^2 + 12x + c$$

- 144       36       12       6

4. Find the value of  $c$  that completes the square.

$$x^2 - 30x + c$$

5. Find the value of  $c$  that completes the square.

$$x^2 + 5x + c$$

Write the trinomial as the square of a binomial.

Write the trinomial as the square of a binomial.

Solve each quadratic equation by completing the square.

6.  $x^2 + 12x + 3 = 0$

7.  $x^2 - 14x + 13 = 0$

8.  $x^2 - 5x - 8 = 0$

9. Explain the first step for solving the quadratic equation  $3x^2 - 24x + 24 = 0$  by completing the square.

Solve the equation  $3x^2 - 24x + 24 = 0$ .

10. Solve the quadratic equation by completing the square.

$$-2x^2 - 14x + 30 = 0$$