

Number:

Textbook Section:

Title:

Patterns

1. $(x+2)^2$

2. $(x-6)^2$

3. $(x+4)^2$

4. $(x-9)^2$

Add the correct value to the expression to complete the square. Then factor the resulting trinomial.

5. $x^2 + 2x$

6. $x^2 - 6x$

7. $x^2 + 10x$

8. $x^2 - 16x$

Solve by completing the square.

9. $y^2 = 10y + 3$

10. $3w^2 - 6w + 9 = 0$

11. $-2x^2 + 6x + 3 = 0$

12. $3x^2 + x - \frac{1}{2} = 0$