

Solving Quadratic Equations by Completing the Square Practice

Solve each equation by completing the square.

1) $n^2 + 14n + 61 = 0$

2) $x^2 - 18x + 87 = 0$

3) $p^2 + 6p + 99 = 0$

4) $r^2 + 2r + 41 = 0$

5) $2v^2 - 8v + 84 = 0$

6) $10x^2 + 18x + 11 = 0$

Answers to

$$1) \{-7 + 2i\sqrt{3}, -7 - 2i\sqrt{3}\}$$

$$4) \{-1 + 2i\sqrt{10}, -1 - 2i\sqrt{10}\}$$

$$2) \{9 + i\sqrt{6}, 9 - i\sqrt{6}\}$$

$$5) \{2 + i\sqrt{38}, 2 - i\sqrt{38}\}$$

$$3) \{-3 + 3i\sqrt{10}, -3 - 3i\sqrt{10}\}$$

$$6) \left\{ \frac{-9 + i\sqrt{29}}{10}, \frac{-9 - i\sqrt{29}}{10} \right\}$$