

SOLVE BY COMPLETING THE SQUARE

Solve each equation by completing the square.

1) $p^2 - 4p - 6 = 0$

- A) $\{2 + \sqrt{10}, 2 - \sqrt{10}\}$
- B) $\{17, 1\}$
- C) $\{5, -19\}$
- D) $\{7, 5\}$

2) $x^2 + 10x + 9 = 0$

- A) $\{-10 + 2\sqrt{47}, -10 - 2\sqrt{47}\}$
- B) $\{-1, -9\}$
- C) $\{11, -1\}$
- D) $\{-10 + 2\sqrt{3}, -10 - 2\sqrt{3}\}$

3) $a^2 - 18a - 63 = 0$

- A) $\{-14 + \sqrt{291}, -14 - \sqrt{291}\}$
- B) $\{21, -3\}$
- C) $\{5, -19\}$
- D) $\{10 + 4\sqrt{10}, 10 - 4\sqrt{10}\}$

4) $p^2 + 4p - 5 = 0$

- A) $\{-6, -8\}$
- B) $\{2 + 2\sqrt{26}, 2 - 2\sqrt{26}\}$
- C) $\{1, -5\}$
- D) $\{1, -3\}$

5) $n^2 - 6n - 40 = 0$

- A) $\{20, -2\}$
- B) $\{12, -6\}$
- C) $\{-2 + 2\sqrt{21}, -2 - 2\sqrt{21}\}$
- D) $\{10, -4\}$

6) $n^2 + 10n - 4 = 0$

- A) $\{8 + \sqrt{53}, 8 - \sqrt{53}\}$
- B) $\{5 + \sqrt{21}, 5 - \sqrt{21}\}$
- C) $\{-5 + \sqrt{29}, -5 - \sqrt{29}\}$
- D) $\{3, -15\}$

7) $r^2 - 6r - 42 = 0$

- A) $\{12, -2\}$
- B) $\{7, -9\}$
- C) $\{3 + \sqrt{51}, 3 - \sqrt{51}\}$
- D) $\{14, -2\}$

8) $n^2 - 2n - 61 = 0$

- A) $\{6, -16\}$
- B) $\{-5 + 2\sqrt{7}, -5 - 2\sqrt{7}\}$
- C) $\{7, -3\}$
- D) $\{1 + \sqrt{62}, 1 - \sqrt{62}\}$

$$9) x^2 - 18x + 32 = 0$$

$$10) x^2 - 12x + 35 = 0$$

$$11) a^2 + 2a - 99 = 0$$

$$12) m^2 + 18m - 40 = 0$$

$$13) r^2 + 12r + 35 = 0$$

$$14) x^2 - 10x - 21 = 0$$

$$15) x^2 + 20x + 84 = 0$$

$$16) k^2 + 10k + 16 = 0$$

$$17) r^2 + 12r - 70 = 0$$

$$18) n^2 - 16n - 57 = 0$$

$$19) b^2 - 6b - 82 = 0$$

$$20) n^2 - 8n - 20 = 0$$

SOLVE BY COMPLETING THE SQUARE

Solve each equation by completing the square.

1) $p^2 - 4p - 6 = 0$

- *A) $\{2 + \sqrt{10}, 2 - \sqrt{10}\}$
- B) $\{17, 1\}$
- C) $\{5, -19\}$
- D) $\{7, 5\}$

2) $x^2 + 10x + 9 = 0$

- A) $\{-10 + 2\sqrt{47}, -10 - 2\sqrt{47}\}$
- *B) $\{-1, -9\}$
- C) $\{11, -1\}$
- D) $\{-10 + 2\sqrt{3}, -10 - 2\sqrt{3}\}$

3) $a^2 - 18a - 63 = 0$

- A) $\{-14 + \sqrt{291}, -14 - \sqrt{291}\}$
- *B) $\{21, -3\}$
- C) $\{5, -19\}$
- D) $\{10 + 4\sqrt{10}, 10 - 4\sqrt{10}\}$

4) $p^2 + 4p - 5 = 0$

- A) $\{-6, -8\}$
- B) $\{2 + 2\sqrt{26}, 2 - 2\sqrt{26}\}$
- *C) $\{1, -5\}$
- D) $\{1, -3\}$

5) $n^2 - 6n - 40 = 0$

- A) $\{20, -2\}$
- B) $\{12, -6\}$
- C) $\{-2 + 2\sqrt{21}, -2 - 2\sqrt{21}\}$
- *D) $\{10, -4\}$

6) $n^2 + 10n - 4 = 0$

- A) $\{8 + \sqrt{53}, 8 - \sqrt{53}\}$
- B) $\{5 + \sqrt{21}, 5 - \sqrt{21}\}$
- *C) $\{-5 + \sqrt{29}, -5 - \sqrt{29}\}$
- D) $\{3, -15\}$

7) $r^2 - 6r - 42 = 0$

- A) $\{12, -2\}$
- B) $\{7, -9\}$
- *C) $\{3 + \sqrt{51}, 3 - \sqrt{51}\}$
- D) $\{14, -2\}$

8) $n^2 - 2n - 61 = 0$

- A) $\{6, -16\}$
- B) $\{-5 + 2\sqrt{7}, -5 - 2\sqrt{7}\}$
- C) $\{7, -3\}$
- *D) $\{1 + \sqrt{62}, 1 - \sqrt{62}\}$

$$9) x^2 - 18x + 32 = 0$$

$$\{16, 2\}$$

$$10) x^2 - 12x + 35 = 0$$

$$\{7, 5\}$$

$$11) a^2 + 2a - 99 = 0$$

$$\{9, -11\}$$

$$12) m^2 + 18m - 40 = 0$$

$$\{2, -20\}$$

$$13) r^2 + 12r + 35 = 0$$

$$\{-5, -7\}$$

$$14) x^2 - 10x - 21 = 0$$

$$\{5 + \sqrt{46}, 5 - \sqrt{46}\}$$

$$15) x^2 + 20x + 84 = 0$$

$$\{-6, -14\}$$

$$16) k^2 + 10k + 16 = 0$$

$$\{-2, -8\}$$

$$17) r^2 + 12r - 70 = 0$$

$$\{-6 + \sqrt{106}, -6 - \sqrt{106}\}$$

$$18) n^2 - 16n - 57 = 0$$

$$\{19, -3\}$$

$$19) b^2 - 6b - 82 = 0$$

$$\{3 + \sqrt{91}, 3 - \sqrt{91}\}$$

$$20) n^2 - 8n - 20 = 0$$

$$\{10, -2\}$$