

Solving Quadratic Equations (E)

Solve each equation for x

1. $x^2 - 12x + 29 = -3$

7. $x^2 + 6x - 6 = 1$

2. $x^2 - 10x + 5 = -11$

8. $x^2 - 6x - 2 = 25$

3. $x^2 + 13x + 36 = -6$

9. $x^2 + 2x - 25 = 38$

4. $x^2 - 5x - 3 = 3$

10. $x^2 - x - 9 = 11$

5. $x^2 - 8x - 2 = 7$

11. $x^2 + 15x + 10 = -44$

6. $x^2 - 4x - 1 = 11$

12. $x^2 - 4x - 4 = 1$

Solving Quadratic Equations (E) Answers

Solve each equation for x

1. $x^2 - 12x + 29 = -3$
 $x^2 - 12x + 32 = 0$
 $(x - 8)(x - 4) = 0$
 $x = 8, 4$

2. $x^2 - 10x + 5 = -11$
 $x^2 - 10x + 16 = 0$
 $(x - 2)(x - 8) = 0$
 $x = 2, 8$

3. $x^2 + 13x + 36 = -6$
 $x^2 + 13x + 42 = 0$
 $(x + 7)(x + 6) = 0$
 $x = -7, -6$

4. $x^2 - 5x - 3 = 3$
 $x^2 - 5x - 6 = 0$
 $(x - 6)(x + 1) = 0$
 $x = 6, -1$

5. $x^2 - 8x - 2 = 7$
 $x^2 - 8x - 9 = 0$
 $(x - 9)(x + 1) = 0$
 $x = 9, -1$

6. $x^2 - 4x - 1 = 11$
 $x^2 - 4x - 12 = 0$
 $(x - 6)(x + 2) = 0$
 $x = 6, -2$

7. $x^2 + 6x - 6 = 1$
 $x^2 + 6x - 7 = 0$
 $(x - 1)(x + 7) = 0$
 $x = 1, -7$

8. $x^2 - 6x - 2 = 25$
 $x^2 - 6x - 27 = 0$
 $(x - 9)(x + 3) = 0$
 $x = 9, -3$

9. $x^2 + 2x - 25 = 38$
 $x^2 + 2x - 63 = 0$
 $(x + 9)(x - 7) = 0$
 $x = -9, 7$

10. $x^2 - x - 9 = 11$
 $x^2 - x - 20 = 0$
 $(x - 5)(x + 4) = 0$
 $x = 5, -4$

11. $x^2 + 15x + 10 = -44$
 $x^2 + 15x + 54 = 0$
 $(x + 6)(x + 9) = 0$
 $x = -6, -9$

12. $x^2 - 4x - 4 = 1$
 $x^2 - 4x - 5 = 0$
 $(x + 1)(x - 5) = 0$
 $x = -1, 5$