

Solving Quadratic Equations (E)

Solve each equation for x

1. $-x^2 + 2x + 48 = 0$

7. $-2x^2 - 9x - 9 = 0$

2. $4x^2 - 49 = 0$

8. $-2x^2 - 2x + 24 = 0$

3. $2x^2 + 10x + 12 = 0$

9. $2x^2 - 15x - 8 = 0$

4. $-x^2 + 4x + 5 = 0$

10. $-2x^2 - 14x + 36 = 0$

5. $-2x^2 + 17x - 36 = 0$

11. $2x^2 - 13x - 45 = 0$

6. $-x^2 - 5x + 36 = 0$

12. $-2x^2 - 17x + 9 = 0$

Solving Quadratic Equations (E) Answers

Solve each equation for x

1. $-x^2 + 2x + 48 = 0$
 $-(x + 6)(x - 8) = 0$
 $x = -6, 8$

7. $-2x^2 - 9x - 9 = 0$
 $-(2x + 3)(x + 3) = 0$
 $x = -1 \frac{1}{2}, -3$

2. $4x^2 - 49 = 0$
 $(2x + 7)(2x - 7) = 0$
 $x = -3 \frac{1}{2}, 3 \frac{1}{2}$

8. $-2x^2 - 2x + 24 = 0$
 $-(2x + 8)(x - 3) = 0$
 $x = -4, 3$

3. $2x^2 + 10x + 12 = 0$
 $(x + 2)(2x + 6) = 0$
 $x = -2, -3$

9. $2x^2 - 15x - 8 = 0$
 $(x - 8)(2x + 1) = 0$
 $x = 8, -\frac{1}{2}$

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

10. $-2x^2 - 14x + 36 = 0$
 $-(x + 9)(2x - 4) = 0$
 $x = -9, 2$

5. $-2x^2 + 17x - 36 = 0$
 $(x - 4)(2x - 9) = 0$
 $x = 4, 4 \frac{1}{2}$

11. $2x^2 - 13x - 45 = 0$
 $(x - 9)(2x + 5) = 0$
 $x = 9, -2 \frac{1}{2}$

6. $-x^2 - 5x + 36 = 0$
 $(x + 9)(x - 4) = 0$
 $x = -9, 4$

12. $-2x^2 - 17x + 9 = 0$
 $-(2x - 1)(x + 9) = 0$
 $x = \frac{1}{2}, -9$