

Solving Quadratic Equations (A)

Solve each equation for x

1. $-x^2 - 12x - 6 = 21$

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

2. $x^2 - 5x + 1 = -3$

8. $-x^2 + x + 48 = -24$

3. $-x^2 + 8x + 9 = 0$

9. $-x^2 - 8x - 11 = 4$

4. $x^2 - 12x + 11 = -21$

10. $x^2 - x - 2 = 4$

5. $x^2 - 7 = 18$

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

6. $-x^2 + 2x + 15 = -9$

12. $-x^2 + 5x + 32 = -4$

Solving Quadratic Equations (A) Answers

Solve each equation for x

1. $-x^2 - 12x - 6 = 21$
 $-x^2 - 12x - 27 = 0$
 $-(x + 3)(x + 9) = 0$
 $x = -3, -9$

7. $-x^2 + 2x + 7 = -1$
 $-x^2 + 2x + 8 = 0$
 $-(x - 4)(x + 2) = 0$
 $x = 4, -2$

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

8. $-x^2 + x + 48 = -24$
 $-x^2 + x + 72 = 0$
 $-(x - 9)(x + 8) = 0$
 $x = 9, -8$

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

9. $-x^2 - 8x - 11 = 4$
 $-x^2 - 8x - 15 = 0$
 $-(x + 5)(x + 3) = 0$
 $x = -5, -3$

4. $x^2 - 12x + 11 = -21$
 $x^2 - 12x + 32 = 0$
 $(x - 8)(x - 4) = 0$
 $x = 8, 4$

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

5. $x^2 - 7 = 18$
 $x^2 - 25 = 0$
 $(x + 5)(x - 5) = 0$
 $x = -5, 5$

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

6. $-x^2 + 2x + 15 = -9$
 $-x^2 + 2x + 24 = 0$
 $(x - 6)(x + 4) = 0$
 $x = 6, -4$

12. $-x^2 + 5x + 32 = -4$
 $-x^2 + 5x + 36 = 0$
 $-(x + 4)(x - 9) = 0$
 $x = -4, 9$