

Solving Quadratic Equations (G)

Solve each equation for x

1. $x^2 - x - 37 = 5$

7. $2x^2 - 3x - 21 = 14$

2. $4x^2 - 6x - 8 = 2$

8. $4x^2 - 16x + 1 = -6$

3. $4x^2 - 6x - 11 = 43$

9. $x^2 - 6x - 26 = 1$

4. $4x^2 + 14x + 1 = -5$

10. $2x^2 + 10x + 4 = -8$

5. $x^2 - x - 8 = 12$

11. $x^2 - 5x - 11 = 3$

6. $2x^2 - 18x + 6 = -22$

12. $2x^2 + 10x - 36 = 12$

Solving Quadratic Equations (G) Answers

Solve each equation for x

1. $x^2 - x - 37 = 5$
 $x^2 - x - 42 = 0$
 $(x - 7)(x + 6) = 0$
 $x = 7, -6$

2. $4x^2 - 6x - 8 = 2$
 $4x^2 - 6x - 10 = 0$
 $(2x - 5)(2x + 2) = 0$
 $x = 2 \frac{1}{2}, -1$

3. $4x^2 - 6x - 11 = 43$
 $4x^2 - 6x - 54 = 0$
 $(2x + 6)(2x - 9) = 0$
 $x = -3, 4 \frac{1}{2}$

4. $4x^2 + 14x + 1 = -5$
 $4x^2 + 14x + 6 = 0$
 $(2x + 1)(2x + 6) = 0$
 $x = -\frac{1}{2}, -3$

5. $x^2 - x - 8 = 12$
 $x^2 - x - 20 = 0$
 $(x + 4)(x - 5) = 0$
 $x = -4, 5$

6. $2x^2 - 18x + 6 = -22$
 $2x^2 - 18x + 28 = 0$
 $(2x - 4)(x - 7) = 0$
 $x = 2, 7$

7. $2x^2 - 3x - 21 = 14$
 $2x^2 - 3x - 35 = 0$
 $(2x + 7)(x - 5) = 0$
 $x = -3 \frac{1}{2}, 5$

8. $4x^2 - 16x + 1 = -6$
 $4x^2 - 16x + 7 = 0$
 $(2x - 1)(2x - 7) = 0$
 $x = \frac{1}{2}, 3 \frac{1}{2}$

9. $x^2 - 6x - 26 = 1$
 $x^2 - 6x - 27 = 0$
 $(x - 9)(x + 3) = 0$
 $x = 9, -3$

10. $2x^2 + 10x + 4 = -8$
 $2x^2 + 10x + 12 = 0$
 $(x + 2)(2x + 6) = 0$
 $x = -2, -3$

11. $x^2 - 5x - 11 = 3$
 $x^2 - 5x - 14 = 0$
 $(x + 2)(x - 7) = 0$
 $x = -2, 7$

12. $2x^2 + 10x - 36 = 12$
 $2x^2 + 10x - 48 = 0$
 $(2x - 6)(x + 8) = 0$
 $x = 3, -8$