

Solving Quadratic Equations (D)

Solve each equation for x

1. $x^2 - 13x + 32 = -8$

7. $x^2 - 9x + 1 = -7$

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

8. $x^2 + 5x - 30 = 6$

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

9. $x^2 + 6x + 1 = -8$

4. $x^2 + 2x - 31 = 4$

10. $x^2 + 4x - 4 = 1$

5. $x^2 - 8x + 6 = -10$

11. $x^2 + 10x + 4 = -21$

6. $x^2 + 4x - 2 = 3$

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

Solving Quadratic Equations (D) Answers

Solve each equation for x

1. $x^2 - 13x + 32 = -8$
 $x^2 - 13x + 40 = 0$
 $(x - 5)(x - 8) = 0$
 $x = 5, 8$

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

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

8. $x^2 + 5x - 30 = 6$
 $x^2 + 5x - 36 = 0$
 $(x - 4)(x + 9) = 0$
 $x = 4, -9$

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

9. $x^2 + 6x + 1 = -8$
 $x^2 + 6x + 9 = 0$
 $(x + 3)(x + 3) = 0$
 $x = -3$

4. $x^2 + 2x - 31 = 4$
 $x^2 + 2x - 35 = 0$
 $(x + 7)(x - 5) = 0$
 $x = -7, 5$

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

5. $x^2 - 8x + 6 = -10$
 $x^2 - 8x + 16 = 0$
 $(x - 4)(x - 4) = 0$
 $x = 4$

11. $x^2 + 10x + 4 = -21$
 $x^2 + 10x + 25 = 0$
 $(x + 5)(x + 5) = 0$
 $x = -5$

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

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