

Solving Quadratic Equations (D)

Solve each equation for x

1. $2x^2 - 11x + 2 = -7$

7. $2x^2 + 15x + 9 = -18$

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

8. $x^2 + 17x + 63 = -9$

3. $-2x^2 + 19x - 27 = 15$

9. $-2x^2 - 19x - 6 = 3$

4. $-4x^2 + 4x + 30 = -18$

10. $-x^2 + 78 = -3$

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

11. $-2x^2 + 5x + 33 = -9$

6. $-4x^2 + 4x + 35 = 0$

12. $2x^2 + 7x - 14 = 35$

Solving Quadratic Equations (D) Answers

Solve each equation for x

1. $2x^2 - 11x + 2 = -7$
 $2x^2 - 11x + 9 = 0$
 $(2x - 9)(x - 1) = 0$
 $x = 4 \frac{1}{2}, 1$

2. $-x^2 - 6x - 7 = 1$
 $-x^2 - 6x - 8 = 0$
 $(x + 4)(x + 2) = 0$
 $x = -4, -2$

3. $-2x^2 + 19x - 27 = 15$
 $-2x^2 + 19x - 42 = 0$
 $(2x - 7)(x - 6) = 0$
 $x = 3 \frac{1}{2}, 6$

4. $-4x^2 + 4x + 30 = -18$
 $-4x^2 + 4x + 48 = 0$
 $-(2x + 6)(2x - 8) = 0$
 $x = -3, 4$

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

6. $-4x^2 + 4x + 35 = 0$
 $-4x^2 + 4x + 35 = 0$
 $(2x + 5)(2x - 7) = 0$
 $x = -2 \frac{1}{2}, 3 \frac{1}{2}$

7. $2x^2 + 15x + 9 = -18$
 $2x^2 + 15x + 27 = 0$
 $(2x + 9)(x + 3) = 0$
 $x = -4 \frac{1}{2}, -3$

8. $x^2 + 17x + 63 = -9$
 $x^2 + 17x + 72 = 0$
 $(x + 8)(x + 9) = 0$
 $x = -8, -9$

9. $-2x^2 - 19x - 6 = 3$
 $-2x^2 - 19x - 9 = 0$
 $-(x + 9)(2x + 1) = 0$
 $x = -9, -\frac{1}{2}$

10. $-x^2 + 78 = -3$
 $-x^2 + 81 = 0$
 $-(x - 9)(x + 9) = 0$
 $x = 9, -9$

11. $-2x^2 + 5x + 33 = -9$
 $-2x^2 + 5x + 42 = 0$
 $-(x - 6)(2x + 7) = 0$
 $x = 6, -3 \frac{1}{2}$

12. $2x^2 + 7x - 14 = 35$
 $2x^2 + 7x - 49 = 0$
 $(x + 7)(2x - 7) = 0$
 $x = -7, 3 \frac{1}{2}$