

Solving Quadratic Equations (C)

Solve each equation for x

1. $18x^2 + 6x - 10 = 14$

7. $24x^2 + 15x - 6 = 3$

2. $12x^2 + 25x - 3 = 4$

8. $35x^2 + 44x - 6 = 1$

3. $56x^2 - 93x + 11 = -16$

9. $16x^2 + 4x - 12 = 8$

4. $3x^2 + 17x - 11 = 17$

10. $16x^2 - 56x + 14 = -10$

5. $4x^2 + 32x + 63 = -1$

11. $21x^2 + 71x + 5 = -35$

6. $42x^2 + 66x + 15 = -9$

12. $18x^2 + 15x + 1 = -2$

Solving Quadratic Equations (C) Answers

Solve each equation for x

1. $18x^2 + 6x - 10 = 14$
 $18x^2 + 6x - 24 = 0$
 $(3x + 4)(6x - 6) = 0$
 $x = -1 \frac{1}{3}, 1$

2. $12x^2 + 25x - 3 = 4$
 $12x^2 + 25x - 7 = 0$
 $(4x - 1)(3x + 7) = 0$
 $x = \frac{1}{4}, -2 \frac{1}{3}$

3. $56x^2 - 93x + 11 = -16$
 $56x^2 - 93x + 27 = 0$
 $(7x - 9)(8x - 3) = 0$
 $x = 1 \frac{2}{7}, \frac{3}{8}$

4. $3x^2 + 17x - 11 = 17$
 $3x^2 + 17x - 28 = 0$
 $(3x - 4)(x + 7) = 0$
 $x = 1 \frac{1}{3}, -7$

5. $4x^2 + 32x + 63 = -1$
 $4x^2 + 32x + 64 = 0$
 $(2x + 8)(2x + 8) = 0$
 $x = -4$

6. $42x^2 + 66x + 15 = -9$
 $42x^2 + 66x + 24 = 0$
 $(6x + 6)(7x + 4) = 0$
 $x = -1, -\frac{4}{7}$

7. $24x^2 + 15x - 6 = 3$
 $24x^2 + 15x - 9 = 0$
 $(8x - 3)(3x + 3) = 0$
 $x = \frac{3}{8}, -1$

8. $35x^2 + 44x - 6 = 1$
 $35x^2 + 44x - 7 = 0$
 $(7x - 1)(5x + 7) = 0$
 $x = \frac{1}{7}, -1 \frac{2}{5}$

9. $16x^2 + 4x - 12 = 8$
 $16x^2 + 4x - 20 = 0$
 $(4x + 5)(4x - 4) = 0$
 $x = -1 \frac{1}{4}, 1$

10. $16x^2 - 56x + 14 = -10$
 $16x^2 - 56x + 24 = 0$
 $(8x - 4)(2x - 6) = 0$
 $x = \frac{1}{2}, 3$

11. $21x^2 + 71x + 5 = -35$
 $21x^2 + 71x + 40 = 0$
 $(3x + 8)(7x + 5) = 0$
 $x = -2 \frac{2}{3}, -\frac{5}{7}$

12. $18x^2 + 15x + 1 = -2$
 $18x^2 + 15x + 3 = 0$
 $(3x + 1)(6x + 3) = 0$
 $x = -\frac{1}{3}, -\frac{1}{2}$