

Solving Quadratic Equations (C)

Name: _____

Date: _____

Solve each equation for x.

1. $6x^2 - 46x - 16 = 0$

11. $-10x^2 - 105x - 245 = 0$

2. $-8x^2 - 20x + 168 = 0$

12. $-16x^2 + 76x + 20 = 0$

3. $6x^2 + 27x + 30 = 0$

13. $-8x^2 - 8x + 6 = 0$

4. $-20x^2 - 5x + 25 = 0$

14. $-6x^2 - 45x + 81 = 0$

5. $-10x^2 + 55x - 45 = 0$

15. $-10x^2 - 75x - 135 = 0$

6. $-3x^2 + 9x + 162 = 0$

16. $-20x^2 - 65x + 60 = 0$

7. $20x^2 - 125x - 105 = 0$

17. $-15x^2 + 80x + 60 = 0$

8. $-12x^2 + 24x + 63 = 0$

18. $10x^2 - 5x - 75 = 0$

9. $-12x^2 + 69x + 105 = 0$

19. $2x^2 - 24x + 70 = 0$

10. $-4x^2 - 30x - 50 = 0$

20. $2x^2 + 6x - 108 = 0$

Solving Quadratic Equations (C) Answers

Name: _____

Date: _____

Solve each equation for x.

- $6x^2 - 46x - 16 = 0$
 $2(3x + 1)(x - 8) = 0$
 $x = -\frac{1}{3}, 8$
- $-8x^2 - 20x + 168 = 0$
 $-4(2x - 7)(x + 6) = 0$
 $x = 3\frac{1}{2}, -6$
- $6x^2 + 27x + 30 = 0$
 $3(2x + 5)(x + 2) = 0$
 $x = -2\frac{1}{2}, -2$
- $-20x^2 - 5x + 25 = 0$
 $-5(x - 1)(4x + 5) = 0$
 $x = 1, -1\frac{1}{4}$
- $-10x^2 + 55x - 45 = 0$
 $-5(x - 1)(2x - 9) = 0$
 $x = 1, 4\frac{1}{2}$
- $-3x^2 + 9x + 162 = 0$
 $-3(x - 9)(x + 6) = 0$
 $x = 9, -6$
- $20x^2 - 125x - 105 = 0$
 $5(4x + 3)(x - 7) = 0$
 $x = -\frac{3}{4}, 7$
- $-12x^2 + 24x + 63 = 0$
 $-3(2x + 3)(2x - 7) = 0$
 $x = -1\frac{1}{2}, 3\frac{1}{2}$
- $-12x^2 + 69x + 105 = 0$
 $-3(x - 7)(4x + 5) = 0$
 $x = 7, -1\frac{1}{4}$
- $-4x^2 - 30x - 50 = 0$
 $-2(2x + 5)(x + 5) = 0$
 $x = -2\frac{1}{2}, -5$
- $-10x^2 - 105x - 245 = 0$
 $-5(x + 7)(2x + 7) = 0$
 $x = -7, -3\frac{1}{2}$
- $-16x^2 + 76x + 20 = 0$
 $-4(x - 5)(4x + 1) = 0$
 $x = 5, -\frac{1}{4}$
- $-8x^2 - 8x + 6 = 0$
 $-2(2x + 3)(2x - 1) = 0$
 $x = -1\frac{1}{2}, \frac{1}{2}$
- $-6x^2 - 45x + 81 = 0$
 $-3(x + 9)(2x - 3) = 0$
 $x = -9, 1\frac{1}{2}$
- $-10x^2 - 75x - 135 = 0$
 $-5(2x + 9)(x + 3) = 0$
 $x = -4\frac{1}{2}, -3$
- $-20x^2 - 65x + 60 = 0$
 $-5(4x - 3)(x + 4) = 0$
 $x = \frac{3}{4}, -4$
- $-15x^2 + 80x + 60 = 0$
 $-5(3x + 2)(x - 6) = 0$
 $x = -\frac{2}{3}, 6$
- $10x^2 - 5x - 75 = 0$
 $5(2x + 5)(x - 3) = 0$
 $x = -2\frac{1}{2}, 3$
- $2x^2 - 24x + 70 = 0$
 $2(x - 5)(x - 7) = 0$
 $x = 5, 7$
- $2x^2 + 6x - 108 = 0$
 $2(x - 6)(x + 9) = 0$
 $x = 6, -9$