

Solving Quadratic Equations (G)

Name: _____

Date: _____

Solve each equation for x.

1. $3x^2 - 11x + 8 = 0$

11. $-x^2 - 16x - 63 = 0$

2. $4x^2 + 45x + 81 = 0$

12. $-4x^2 - 24x - 35 = 0$

3. $3x^2 - 8x - 3 = 0$

13. $3x^2 - x - 24 = 0$

4. $2x^2 + 17x + 35 = 0$

14. $-4x^2 - 25x - 25 = 0$

5. $4x^2 + 13x - 35 = 0$

15. $x^2 + x - 56 = 0$

6. $2x^2 - 17x + 35 = 0$

16. $3x^2 + 14x - 24 = 0$

7. $-4x^2 + 37x - 63 = 0$

17. $4x^2 - 33x + 54 = 0$

8. $-x^2 + 5x + 6 = 0$

18. $-4x^2 - 31x + 8 = 0$

9. $-3x^2 - 16x + 35 = 0$

19. $-3x^2 + 26x - 48 = 0$

10. $4x^2 - 21x - 18 = 0$

20. $-3x^2 + 23x - 14 = 0$

Solving Quadratic Equations (G) Answers

Name: _____

Date: _____

Solve each equation for x.

- $3x^2 - 11x + 8 = 0$
 $(x - 1)(3x - 8) = 0$
 $x = 1, 2\frac{2}{3}$
- $4x^2 + 45x + 81 = 0$
 $(4x + 9)(x + 9) = 0$
 $x = -2\frac{1}{4}, -9$
- $3x^2 - 8x - 3 = 0$
 $(x - 3)(3x + 1) = 0$
 $x = 3, -\frac{1}{3}$
- $2x^2 + 17x + 35 = 0$
 $(x + 5)(2x + 7) = 0$
 $x = -5, -3\frac{1}{2}$
- $4x^2 + 13x - 35 = 0$
 $(4x - 7)(x + 5) = 0$
 $x = 1\frac{3}{4}, -5$
- $2x^2 - 17x + 35 = 0$
 $(x - 5)(2x - 7) = 0$
 $x = 5, 3\frac{1}{2}$
- $-4x^2 + 37x - 63 = 0$
 $-(4x - 9)(x - 7) = 0$
 $x = 2\frac{1}{4}, 7$
- $-x^2 + 5x + 6 = 0$
 $-(x + 1)(x - 6) = 0$
 $x = -1, 6$
- $-3x^2 - 16x + 35 = 0$
 $-(3x - 5)(x + 7) = 0$
 $x = 1\frac{2}{3}, -7$
- $4x^2 - 21x - 18 = 0$
 $(x - 6)(4x + 3) = 0$
 $x = 6, -\frac{3}{4}$
- $-x^2 - 16x - 63 = 0$
 $-(x + 7)(x + 9) = 0$
 $x = -7, -9$
- $-4x^2 - 24x - 35 = 0$
 $-(2x + 5)(2x + 7) = 0$
 $x = -2\frac{1}{2}, -3\frac{1}{2}$
- $3x^2 - x - 24 = 0$
 $(3x + 8)(x - 3) = 0$
 $x = -2\frac{2}{3}, 3$
- $-4x^2 - 25x - 25 = 0$
 $-(x + 5)(4x + 5) = 0$
 $x = -5, -1\frac{1}{4}$
- $x^2 + x - 56 = 0$
 $(x + 8)(x - 7) = 0$
 $x = -8, 7$
- $3x^2 + 14x - 24 = 0$
 $(3x - 4)(x + 6) = 0$
 $x = 1\frac{1}{3}, -6$
- $4x^2 - 33x + 54 = 0$
 $(x - 6)(4x - 9) = 0$
 $x = 6, 2\frac{1}{4}$
- $-4x^2 - 31x + 8 = 0$
 $-(4x - 1)(x + 8) = 0$
 $x = \frac{1}{4}, -8$
- $-3x^2 + 26x - 48 = 0$
 $-(x - 6)(3x - 8) = 0$
 $x = 6, 2\frac{2}{3}$
- $-3x^2 + 23x - 14 = 0$
 $-(3x - 2)(x - 7) = 0$
 $x = \frac{2}{3}, 7$