Solving Quadratic Equations (G)

Name: _____ Date: _____

Solve each equation for x.

1. $-4x^2 + 8x + 252 = 0$
2. $-4x^2 - 36x - 72 = 0$
3. $4x^2 - 4x - 8 = 0$
4. $-3x^2 - 15x + 42 = 0$
5. $3x^2 - 36x + 81 = 0$
6. $5x^2 + 10x - 175 = 0$
7. $-2x^2 - 6x + 108 = 0$
8. $-3x^2 + 33x - 72 = 0$
9. $-2x^2 + 36x - 162 = 0$
10. $-2x^2 - 34x - 144 = 0$
11. $5x^2 - 5x - 280 = 0$
12. $-3x^2 - 39x - 108 = 0$
13. $2x^2 - 6x - 108 = 0$
14. $-2x^2 + 24x - 64 = 0$
15. $5x^2 - 320 = 0$
16. $-2x^2 - 6x + 56 = 0$
17. $3x^2 - 3x - 18 = 0$
18. $-3x^2 + 12x - 9 = 0$
19. $4x^2 - 12x + 8 = 0$
20. $3x^2 + 12x + 12 = 0$

Solving Quadratic Equations (G) Answers

Name: _____ Date: _____

Solve each equation for x.

1. $-4x^2 + 8x + 252 = 0$
   $-4(x + 7)(x - 9) = 0$
   $x = -7, 9$

2. $-4x^2 - 36x - 72 = 0$
   $-4(x + 3)(x + 6) = 0$
   $x = -3, -6$

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

4. $-3x^2 - 15x + 42 = 0$
   $-3(x - 2)(x + 7) = 0$
   $x = 2, -7$

5. $3x^2 - 36x + 81 = 0$
   $3(x - 9)(x - 3) = 0$
   $x = 9, 3$

6. $5x^2 + 10x - 175 = 0$
   $5(x + 7)(x - 5) = 0$
   $x = -7, 5$

7. $-2x^2 - 6x + 108 = 0$
   $-2(x + 9)(x - 6) = 0$
   $x = -9, 6$

8. $-3x^2 + 33x - 72 = 0$
   $-3(x - 3)(x - 8) = 0$
   $x = 3, 8$

9. $-2x^2 + 36x - 162 = 0$
   $-2(x - 9)(x - 9) = -2(x - 9)^2 = 0$
   $x = 9$

10. $-2x^2 - 34x - 144 = 0$
    $-2(x + 8)(x + 9) = 0$
    $x = -8, -9$

11. $5x^2 - 5x - 280 = 0$
    $5(x + 7)(x - 8) = 0$
    $x = -7, 8$

12. $-3x^2 - 39x - 108 = 0$
    $-3(x + 4)(x + 9) = 0$
    $x = -4, -9$

13. $2x^2 - 6x - 108 = 0$
    $2(x + 6)(x - 9) = 0$
    $x = -6, 9$

14. $-2x^2 + 24x - 64 = 0$
    $-2(x - 8)(x - 4) = 0$
    $x = 8, 4$

15. $5x^2 - 320 = 0$
    $5(x - 8)(x + 8) = 0$
    $x = 8, -8$

16. $-2x^2 - 6x + 56 = 0$
    $-2(x - 4)(x + 7) = 0$
    $x = 4, -7$

17. $3x^2 - 3x - 18 = 0$
    $3(x + 2)(x - 3) = 0$
    $x = -2, 3$

18. $-3x^2 + 12x - 9 = 0$
    $-3(x - 1)(x - 3) = 0$
    $x = 1, 3$

19. $4x^2 - 12x + 8 = 0$
    $4(x - 2)(x - 1) = 0$
    $x = 2, 1$

20. $3x^2 + 12x + 12 = 0$
    $3(x + 2)(x + 2) = 3(x + 2)^2 = 0$
    $x = -2$