Solving Quadratic Equations (G)

Name:_____

Date:_____

Solve each equation for x.

1. $4x^2 - 7x + 3 = 0$

2. $4x^2 - 16x - 9 = 0$

3. $3x^2 + 8x - 16 = 0$

4. $3x^2 + 19x - 14 = 0$

5. $5x^2 + 39x - 54 = 0$

6. $5x^2 - 18x + 16 = 0$

7. $3x^2 - 4x + 1 = 0$

8. $x^2 + 12x + 35 = 0$

9. $5x^2 - 43x + 56 = 0$

10. $x^2 + 2x - 24 = 0$

11. $4x^2 - 17x + 4 = 0$

12. $3x^2 + 35x + 72 = 0$

13. $2x^2 - 21x + 54 = 0$

14. $4x^2 - 5x + 1 = 0$

15. $5x^2 + 42x - 27 = 0$

16. $4x^2 - 37x + 63 = 0$

17. $3x^2 - 22x + 7 = 0$

18. $x^2 + 5x + 4 = 0$

19. $x^2 + 4x - 5 = 0$

20. $x^2 - 49 = 0$

Name: _____

Date: _____

Solve each equation for x.

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

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

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

4. $3x^2 + 19x - 14 = 0$
   $(x + 7)(3x - 2) = 0$
   $x = -7, \frac{2}{3}$

5. $5x^2 + 39x - 54 = 0$
   $(x + 9)(5x - 6) = 0$
   $x = -9, 1\frac{1}{5}$

6. $5x^2 - 18x + 16 = 0$
   $(x - 2)(5x - 8) = 0$
   $x = 2, 1\frac{3}{5}$

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

8. $x^2 + 12x + 35 = 0$
   $(x + 7)(x + 5) = 0$
   $x = -7, -5$

9. $5x^2 - 43x + 56 = 0$
   $(5x - 8)(x - 7) = 0$
   $x = 1\frac{3}{5}, 7$

10. $x^2 + 2x - 24 = 0$
    $(x + 6)(x - 4) = 0$
    $x = -6, 4$

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

12. $3x^2 + 35x + 72 = 0$
    $(3x + 8)(x + 9) = 0$
    $x = -2\frac{2}{3}, -9$

13. $2x^2 - 21x + 54 = 0$
    $(x - 6)(2x - 9) = 0$
    $x = 6, 4\frac{1}{2}$

14. $4x^2 - 5x + 1 = 0$
    $(x - 1)(4x - 1) = 0$
    $x = 1, \frac{1}{4}$

15. $5x^2 + 42x - 27 = 0$
    $(x + 9)(5x - 3) = 0$
    $x = -9, \frac{3}{5}$

16. $4x^2 - 37x + 63 = 0$
    $(x - 7)(4x - 9) = 0$
    $x = 7, 2\frac{1}{4}$

17. $3x^2 - 22x + 7 = 0$
    $(x - 7)(3x - 1) = 0$
    $x = 7, \frac{1}{3}$

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

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

20. $x^2 - 49 = 0$
    $(x - 7)(x + 7) = 0$
    $x = 7, -7$