Solving Quadratic Equations (D)

Name:_____   Date:_____

Solve each equation for x.

1. $-5x^2 + x + 18 = 0$

2. $x^2 - 5x - 24 = 0$

3. $-x^2 - 4x + 21 = 0$

4. $5x^2 + 43x - 18 = 0$

5. $6x^2 + 7x - 24 = 0$

6. $5x^2 - 3x - 2 = 0$

7. $-2x^2 - 5x + 3 = 0$

8. $-7x^2 - 57x - 56 = 0$

9. $4x^2 - 21x + 5 = 0$

10. $3x^2 - 11x + 8 = 0$

11. $-6x^2 + 31x - 18 = 0$

12. $-3x^2 + 10x - 8 = 0$

13. $-3x^2 - 34x - 63 = 0$

14. $8x^2 - 65x + 8 = 0$

15. $8x^2 - 57x - 56 = 0$

16. $5x^2 - 27x + 10 = 0$

17. $4x^2 + 37x + 9 = 0$

18. $-6x^2 - 25x + 25 = 0$

19. $8x^2 + 2x - 15 = 0$

20. $7x^2 + 39x - 18 = 0$

Solving Quadratic Equations (D) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $-5x^2 + x + 18 = 0$
   $-(x - 2)(5x + 9) = 0$
   $x = 2, -1\frac{4}{5}$

2. $x^2 - 5x - 24 = 0$
   $(x - 8)(x + 3) = 0$
   $x = 8, -3$

3. $-x^2 - 4x + 21 = 0$
   $-(x + 7)(x - 3) = 0$
   $x = -7, 3$

4. $5x^2 + 43x - 18 = 0$
   $(5x - 2)(x + 9) = 0$
   $x = \frac{2}{5}, -9$

5. $6x^2 + 7x - 24 = 0$
   $(3x + 8)(2x - 3) = 0$
   $x = -2\frac{2}{3}, 1\frac{1}{2}$

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

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

8. $-7x^2 - 57x - 56 = 0$
   $-(x + 7)(7x + 8) = 0$
   $x = -7, -1\frac{1}{7}$

9. $4x^2 - 21x + 5 = 0$
   $(4x - 1)(x - 5) = 0$
   $x = \frac{1}{4}, 5$

10. $3x^2 - 11x + 8 = 0$
    $(3x - 8)(x - 1) = 0$
    $x = 2\frac{2}{3}, 1$

11. $-6x^2 + 31x - 18 = 0$
    $-(2x - 9)(3x - 2) = 0$
    $x = 4\frac{1}{2}, \frac{2}{3}$

12. $-3x^2 + 10x - 8 = 0$
    $-(3x - 4)(x - 2) = 0$
    $x = 1\frac{1}{3}, 2$

13. $-3x^2 - 34x - 63 = 0$
    $-(x + 9)(3x + 7) = 0$
    $x = -9, -2\frac{1}{3}$

14. $8x^2 - 65x + 8 = 0$
    $(x - 8)(8x - 1) = 0$
    $x = 8, \frac{1}{8}$

15. $8x^2 - 57x - 56 = 0$
    $(x - 8)(8x + 7) = 0$
    $x = 8, -\frac{7}{8}$

16. $5x^2 - 27x + 10 = 0$
    $(5x - 2)(x - 5) = 0$
    $x = \frac{2}{5}, 5$

17. $4x^2 + 37x + 9 = 0$
    $(4x + 1)(x + 9) = 0$
    $x = -\frac{1}{4}, -9$

18. $-6x^2 - 25x + 25 = 0$
    $-(6x - 5)(x + 5) = 0$
    $x = \frac{5}{6}, -5$

19. $8x^2 + 2x - 15 = 0$
    $(4x - 5)(2x + 3) = 0$
    $x = 1\frac{1}{4}, -1\frac{1}{2}$

20. $7x^2 + 39x - 18 = 0$
    $(7x - 3)(x + 6) = 0$
    $x = \frac{3}{7}, -6$