Solving Quadratic Equations (C)

Name: _____ Date: _____

Solve each equation for x.

1. $6x^2 + 35x + 49 = 0$
2. $9x^2 + 68x - 32 = 0$
3. $9x^2 + 68x + 35 = 0$
4. $8x^2 + 50x + 63 = 0$
5. $7x^2 - 58x - 45 = 0$
6. $9x^2 + 30x + 16 = 0$
7. $3x^2 + 16x + 21 = 0$
8. $7x^2 - 52x + 21 = 0$
9. $3x^2 - 14x - 5 = 0$
10. $6x^2 + 5x - 1 = 0$
11. $8x^2 - 42x + 27 = 0$
12. $5x^2 + 11x + 6 = 0$
13. $8x^2 + 30x - 27 = 0$
14. $6x^2 - 23x + 21 = 0$
15. $8x^2 + 59x + 21 = 0$
16. $9x^2 - 38x + 8 = 0$
17. $7x^2 + 34x - 5 = 0$
18. $2x^2 - 5x - 12 = 0$
19. $5x^2 + 24x - 36 = 0$
20. $2x^2 - 11x + 14 = 0$

Solving Quadratic Equations (C) Answers

Name: _____ Date: _____

Solve each equation for x.

1. $6x^2 + 35x + 49 = 0$
   $(2x + 7)(3x + 7) = 0$
   $x = -3\frac{1}{2}, -2\frac{1}{3}$

2. $9x^2 + 68x - 32 = 0$
   $(x + 8)(9x - 4) = 0$
   $x = -8, \frac{4}{9}$

3. $9x^2 + 68x + 35 = 0$
   $(x + 7)(9x + 5) = 0$
   $x = -7, -\frac{5}{9}$

4. $8x^2 + 50x + 63 = 0$
   $(4x + 7)(2x + 9) = 0$
   $x = -1\frac{3}{4}, -4\frac{1}{2}$

5. $7x^2 - 58x - 45 = 0$
   $(x - 9)(7x + 5) = 0$
   $x = 9, -\frac{5}{7}$

6. $9x^2 + 30x + 16 = 0$
   $(3x + 8)(3x + 2) = 0$
   $x = -2\frac{2}{3}, -\frac{2}{3}$

7. $3x^2 + 16x + 21 = 0$
   $(3x + 7)(x + 3) = 0$
   $x = -2\frac{1}{3}, -3$

8. $7x^2 - 52x + 21 = 0$
   $(7x - 3)(x - 7) = 0$
   $x = \frac{3}{7}, 7$

9. $3x^2 - 14x - 5 = 0$
   $(x - 5)(3x + 1) = 0$
   $x = 5, -\frac{1}{3}$

10. $6x^2 + 5x - 1 = 0$
    $(6x - 1)(x + 1) = 0$
    $x = \frac{1}{6}, -1$

11. $8x^2 - 42x + 27 = 0$
    $(4x - 3)(2x - 9) = 0$
    $x = \frac{3}{4}, 4\frac{1}{2}$

12. $5x^2 + 11x + 6 = 0$
    $(5x + 6)(x + 1) = 0$
    $x = -1\frac{1}{5}, -1$

13. $8x^2 + 30x - 27 = 0$
    $(2x + 9)(4x - 3) = 0$
    $x = -4\frac{1}{2}, \frac{3}{4}$

14. $6x^2 - 23x + 21 = 0$
    $(3x - 7)(2x - 3) = 0$
    $x = 2\frac{1}{3}, 1\frac{1}{2}$

15. $8x^2 + 59x + 21 = 0$
    $(x + 7)(8x + 3) = 0$
    $x = -7, -\frac{3}{8}$

16. $9x^2 - 38x + 8 = 0$
    $(9x - 2)(x - 4) = 0$
    $x = \frac{2}{9}, 4$

17. $7x^2 + 34x - 5 = 0$
    $(x + 5)(7x - 1) = 0$
    $x = -5, \frac{1}{7}$

18. $2x^2 - 5x - 12 = 0$
    $(x - 4)(2x + 3) = 0$
    $x = 4, -1\frac{1}{2}$

19. $5x^2 + 24x - 36 = 0$
    $(5x - 6)(x + 6) = 0$
    $x = 1\frac{1}{5}, -6$

20. $2x^2 - 11x + 14 = 0$
    $(x - 2)(2x - 7) = 0$
    $x = 2, 3\frac{1}{2}$