Solving Quadratic Equations (C)

Name: _____ Date: _____

Solve each equation for x.

1. $-2x^2 + 50 = 0$
2. $-5x^2 + 60x - 160 = 0$
3. $-3x^2 - 24x - 45 = 0$
4. $2x^2 + 4x - 48 = 0$
5. $2x^2 + 4x - 126 = 0$
6. $-2x^2 + 32x - 126 = 0$
7. $2x^2 - 6x - 36 = 0$
8. $-5x^2 - 35x + 40 = 0$
9. $4x^2 - 36x + 56 = 0$
10. $-4x^2 + 64x - 256 = 0$
11. $4x^2 - 100 = 0$
12. $4x^2 + 20x + 24 = 0$
13. $-4x^2 - 12x + 216 = 0$
14. $5x^2 - 40x - 45 = 0$
15. $4x^2 - 64x + 252 = 0$
16. $3x^2 + 45x + 168 = 0$
17. $-2x^2 - 4x + 30 = 0$
18. $-3x^2 + 39x - 120 = 0$
19. $-3x^2 - 6x + 45 = 0$
20. $-2x^2 + 8x + 10 = 0$

Solving Quadratic Equations (C) Answers

Name: _____ Date: _____

Solve each equation for x.

1. $-2x^2 + 50 = 0$
   $-2(x-5)(x+5) = 0$
   $x = 5, -5$

2. $-5x^2 + 60x - 160 = 0$
   $-5(x-4)(x-8) = 0$
   $x = 4, 8$

3. $-3x^2 - 24x - 45 = 0$
   $-3(x+5)(x+3) = 0$
   $x = -5, -3$

4. $2x^2 + 4x - 48 = 0$
   $2(x+6)(x-4) = 0$
   $x = -6, 4$

5. $2x^2 + 4x - 126 = 0$
   $2(x-7)(x+9) = 0$
   $x = 7, -9$

6. $-2x^2 + 32x - 126 = 0$
   $-2(x-7)(x-9) = 0$
   $x = 7, 9$

7. $2x^2 - 6x - 36 = 0$
   $2(x+3)(x-6) = 0$
   $x = -3, 6$

8. $-5x^2 - 35x + 40 = 0$
   $-5(x-1)(x+8) = 0$
   $x = 1, -8$

9. $4x^2 - 36x + 56 = 0$
   $4(x-7)(x-2) = 0$
   $x = 7, 2$

10. $-4x^2 + 64x - 256 = 0$
    $-4(x-8)(x-8) = -4(x-8)^2 = 0$
    $x = 8$

11. $4x^2 - 100 = 0$
    $4(x+5)(x-5) = 0$
    $x = -5, 5$

12. $4x^2 + 20x + 24 = 0$
    $4(x+3)(x+2) = 0$
    $x = -3, -2$

13. $-4x^2 - 12x + 216 = 0$
    $-4(x-6)(x+9) = 0$
    $x = 6, -9$

14. $5x^2 - 40x - 45 = 0$
    $5(x-9)(x+1) = 0$
    $x = 9, -1$

15. $4x^2 - 64x + 252 = 0$
    $4(x-9)(x-7) = 0$
    $x = 9, 7$

16. $3x^2 + 45x + 168 = 0$
    $3(x+7)(x+8) = 0$
    $x = -7, -8$

17. $-2x^2 - 4x + 30 = 0$
    $-2(x+5)(x-3) = 0$
    $x = -5, 3$

18. $-3x^2 + 39x - 120 = 0$
    $-3(x-8)(x-5) = 0$
    $x = 8, 5$

19. $-3x^2 - 6x + 45 = 0$
    $-3(x+5)(x-3) = 0$
    $x = -5, 3$

20. $-2x^2 + 8x + 10 = 0$
    $-2(x+1)(x-5) = 0$
    $x = -1, 5$