Solving Quadratic Equations (I)

Name: _____ Date: _____

Solve each equation for x.

1. $30x^2 - 13x - 3 = 0$
2. $42x^2 - 41x - 8 = 0$
3. $9x^2 + 19x - 24 = 0$
4. $27x^2 + 60x - 7 = 0$
5. $48x^2 + 98x + 49 = 0$
6. $48x^2 - 86x + 35 = 0$
7. $64x^2 - 64x - 9 = 0$
8. $15x^2 - 14x - 49 = 0$
9. $18x^2 - 45x - 8 = 0$
10. $16x^2 + 22x - 3 = 0$
11. $16x^2 + 74x + 9 = 0$
12. $35x^2 - 22x - 24 = 0$
13. $9x^2 - 31x - 20 = 0$
14. $5x^2 + 19x - 4 = 0$
15. $56x^2 + 59x + 15 = 0$
16. $6x^2 - 25x + 24 = 0$
17. $24x^2 - 55x - 24 = 0$
18. $40x^2 + 11x - 2 = 0$
19. $18x^2 - 9x - 35 = 0$
20. $4x^2 + 27x + 35 = 0$

Solving Quadratic Equations (I) Answers

Name: _____ Date: _____

Solve each equation for x.

1. $30x^2 - 13x - 3 = 0$
$(6x+1)(5x-3) = 0$
$x = -\frac{1}{6}, \frac{3}{5}$

2. $42x^2 - 41x - 8 = 0$
$(7x-8)(6x+1) = 0$
$x = 1\frac{1}{7}, -\frac{1}{6}$

3. $9x^2 + 19x - 24 = 0$
$(9x-8)(x+3) = 0$
$x = \frac{8}{9}, -3$

4. $27x^2 + 60x - 7 = 0$
$(3x+7)(9x-1) = 0$
$x = -2\frac{1}{3}, \frac{1}{9}$

5. $48x^2 + 98x + 49 = 0$
$(6x+7)(8x+7) = 0$
$x = -1\frac{1}{6}, -\frac{7}{8}$

6. $48x^2 - 86x + 35 = 0$
$(6x-7)(8x-5) = 0$
$x = 1\frac{1}{6}, \frac{5}{8}$

7. $64x^2 - 64x - 9 = 0$
$(8x-9)(8x+1) = 0$
$x = 1\frac{1}{8}, -\frac{1}{8}$

8. $15x^2 - 14x - 49 = 0$
$(5x+7)(3x-7) = 0$
$x = -1\frac{2}{5}, 2\frac{1}{3}$

9. $18x^2 - 45x - 8 = 0$
$(3x-8)(6x+1) = 0$
$x = 2\frac{2}{3}, -\frac{1}{6}$

10. $16x^2 + 22x - 3 = 0$
$(8x-1)(2x+3) = 0$
$x = \frac{1}{8}, -1\frac{1}{2}$

11. $16x^2 + 74x + 9 = 0$
$(2x+9)(8x+1) = 0$
$x = -4\frac{1}{2}, -\frac{1}{8}$

12. $35x^2 - 22x - 24 = 0$
$(5x-6)(7x+4) = 0$
$x = 1\frac{1}{5}, -\frac{4}{7}$

13. $9x^2 - 31x - 20 = 0$
$(x-4)(9x+5) = 0$
$x = 4, -\frac{5}{9}$

14. $5x^2 + 19x - 4 = 0$
$(x+4)(5x-1) = 0$
$x = -4, \frac{1}{5}$

15. $56x^2 + 59x + 15 = 0$
$(7x+3)(8x+5) = 0$
$x = -\frac{3}{7}, -\frac{5}{8}$

16. $6x^2 - 25x + 24 = 0$
$(2x-3)(3x-8) = 0$
$x = 1\frac{1}{2}, 2\frac{2}{3}$

17. $24x^2 - 55x - 24 = 0$
$(3x-8)(8x+3) = 0$
$x = 2\frac{2}{3}, -\frac{3}{8}$

18. $40x^2 + 11x - 2 = 0$
$(8x-1)(5x+2) = 0$
$x = \frac{1}{8}, -\frac{2}{5}$

19. $18x^2 - 9x - 35 = 0$
$(6x+7)(3x-5) = 0$
$x = -1\frac{1}{6}, 1\frac{2}{3}$

20. $4x^2 + 27x + 35 = 0$
$(4x+7)(x+5) = 0$
$x = -1\frac{3}{4}, -5$