

Solving Quadratic Equations (B)

Name: _____

Date: _____

Solve each equation for x.

1. $28x^2 + 84x - 189 = 0$

11. $-56x^2 + 208x - 120 = 0$

2. $35x^2 - 154x + 56 = 0$

12. $16x^2 - 158x + 126 = 0$

3. $10x^2 - 45x - 175 = 0$

13. $24x^2 + 76x - 144 = 0$

4. $-48x^2 + 36x + 54 = 0$

14. $-20x^2 - 75x + 20 = 0$

5. $12x^2 + 4x - 40 = 0$

15. $21x^2 - 144x - 21 = 0$

6. $16x^2 + 60x - 100 = 0$

16. $7x^2 + 21x - 196 = 0$

7. $27x^2 - 75 = 0$

17. $21x^2 + 7x - 14 = 0$

8. $14x^2 - 130x + 36 = 0$

18. $-30x^2 - 66x - 36 = 0$

9. $-42x^2 + 318x - 168 = 0$

19. $-28x^2 + 120x + 100 = 0$

10. $32x^2 + 120x + 112 = 0$

20. $4x^2 + 28x + 48 = 0$

Solving Quadratic Equations (B) Answers

Name: _____

Date: _____

Solve each equation for x.

- $28x^2 + 84x - 189 = 0$
 $7(2x + 9)(2x - 3) = 0$
 $x = -4\frac{1}{2}, 1\frac{1}{2}$
- $35x^2 - 154x + 56 = 0$
 $7(5x - 2)(x - 4) = 0$
 $x = \frac{2}{5}, 4$
- $10x^2 - 45x - 175 = 0$
 $5(x - 7)(2x + 5) = 0$
 $x = 7, -2\frac{1}{2}$
- $-48x^2 + 36x + 54 = 0$
 $-6(4x + 3)(2x - 3) = 0$
 $x = -\frac{3}{4}, 1\frac{1}{2}$
- $12x^2 + 4x - 40 = 0$
 $4(3x - 5)(x + 2) = 0$
 $x = 1\frac{2}{3}, -2$
- $16x^2 + 60x - 100 = 0$
 $4(4x - 5)(x + 5) = 0$
 $x = 1\frac{1}{4}, -5$
- $27x^2 - 75 = 0$
 $3(3x + 5)(3x - 5) = 0$
 $x = -1\frac{2}{3}, 1\frac{2}{3}$
- $14x^2 - 130x + 36 = 0$
 $2(7x - 2)(x - 9) = 0$
 $x = \frac{2}{7}, 9$
- $-42x^2 + 318x - 168 = 0$
 $-6(7x - 4)(x - 7) = 0$
 $x = \frac{4}{7}, 7$
- $32x^2 + 120x + 112 = 0$
 $8(x + 2)(4x + 7) = 0$
 $x = -2, -1\frac{3}{4}$
- $-56x^2 + 208x - 120 = 0$
 $-8(7x - 5)(x - 3) = 0$
 $x = \frac{5}{7}, 3$
- $16x^2 - 158x + 126 = 0$
 $2(8x - 7)(x - 9) = 0$
 $x = \frac{7}{8}, 9$
- $24x^2 + 76x - 144 = 0$
 $4(2x + 9)(3x - 4) = 0$
 $x = -4\frac{1}{2}, 1\frac{1}{3}$
- $-20x^2 - 75x + 20 = 0$
 $-5(4x - 1)(x + 4) = 0$
 $x = \frac{1}{4}, -4$
- $21x^2 - 144x - 21 = 0$
 $3(x - 7)(7x + 1) = 0$
 $x = 7, -\frac{1}{7}$
- $7x^2 + 21x - 196 = 0$
 $7(x + 7)(x - 4) = 0$
 $x = -7, 4$
- $21x^2 + 7x - 14 = 0$
 $7(x + 1)(3x - 2) = 0$
 $x = -1, \frac{2}{3}$
- $-30x^2 - 66x - 36 = 0$
 $-6(x + 1)(5x + 6) = 0$
 $x = -1, -1\frac{1}{5}$
- $-28x^2 + 120x + 100 = 0$
 $-4(7x + 5)(x - 5) = 0$
 $x = -\frac{5}{7}, 5$
- $4x^2 + 28x + 48 = 0$
 $4(x + 3)(x + 4) = 0$
 $x = -3, -4$