

Solving Quadratic Equations (F)

Name: _____

Date: _____

Solve each equation for x.

1. $12x^2 + 12x - 45 = 0$

11. $-8x^2 - 30x + 108 = 0$

2. $6x^2 + 69x + 135 = 0$

12. $-8x^2 - 20x + 168 = 0$

3. $10x^2 + 28x - 48 = 0$

13. $10x^2 + 15x - 135 = 0$

4. $20x^2 - 80x + 75 = 0$

14. $-8x^2 + 8x + 30 = 0$

5. $20x^2 + 76x + 72 = 0$

15. $-12x^2 + 27x + 84 = 0$

6. $15x^2 + 69x - 126 = 0$

16. $-25x^2 + 30x + 40 = 0$

7. $9x^2 + 39x + 36 = 0$

17. $10x^2 + 74x + 84 = 0$

8. $8x^2 - 54x + 70 = 0$

18. $-25x^2 - 55x + 60 = 0$

9. $-4x^2 + 42x - 54 = 0$

19. $-4x^2 + 324 = 0$

10. $2x^2 - 2 = 0$

20. $15x^2 + 70x + 40 = 0$

Solving Quadratic Equations (F) Answers

Name: _____

Date: _____

Solve each equation for x.

- $12x^2 + 12x - 45 = 0$
 $3(2x - 3)(2x + 5) = 0$
 $x = 1\frac{1}{2}, -2\frac{1}{2}$
- $6x^2 + 69x + 135 = 0$
 $3(2x + 5)(x + 9) = 0$
 $x = -2\frac{1}{2}, -9$
- $10x^2 + 28x - 48 = 0$
 $2(x + 4)(5x - 6) = 0$
 $x = -4, 1\frac{1}{5}$
- $20x^2 - 80x + 75 = 0$
 $5(2x - 3)(2x - 5) = 0$
 $x = 1\frac{1}{2}, 2\frac{1}{2}$
- $20x^2 + 76x + 72 = 0$
 $4(5x + 9)(x + 2) = 0$
 $x = -1\frac{4}{5}, -2$
- $15x^2 + 69x - 126 = 0$
 $3(5x - 7)(x + 6) = 0$
 $x = 1\frac{2}{5}, -6$
- $9x^2 + 39x + 36 = 0$
 $3(x + 3)(3x + 4) = 0$
 $x = -3, -1\frac{1}{3}$
- $8x^2 - 54x + 70 = 0$
 $2(x - 5)(4x - 7) = 0$
 $x = 5, 1\frac{3}{4}$
- $-4x^2 + 42x - 54 = 0$
 $-2(2x - 3)(x - 9) = 0$
 $x = 1\frac{1}{2}, 9$
- $2x^2 - 2 = 0$
 $2(x + 1)(x - 1) = 0$
 $x = -1, 1$
- $-8x^2 - 30x + 108 = 0$
 $-2(x + 6)(4x - 9) = 0$
 $x = -6, 2\frac{1}{4}$
- $-8x^2 - 20x + 168 = 0$
 $-4(2x - 7)(x + 6) = 0$
 $x = 3\frac{1}{2}, -6$
- $10x^2 + 15x - 135 = 0$
 $5(x - 3)(2x + 9) = 0$
 $x = 3, -4\frac{1}{2}$
- $-8x^2 + 8x + 30 = 0$
 $-2(2x + 3)(2x - 5) = 0$
 $x = -1\frac{1}{2}, 2\frac{1}{2}$
- $-12x^2 + 27x + 84 = 0$
 $-3(x - 4)(4x + 7) = 0$
 $x = 4, -1\frac{3}{4}$
- $-25x^2 + 30x + 40 = 0$
 $-5(5x + 4)(x - 2) = 0$
 $x = -\frac{4}{5}, 2$
- $10x^2 + 74x + 84 = 0$
 $2(x + 6)(5x + 7) = 0$
 $x = -6, -1\frac{2}{5}$
- $-25x^2 - 55x + 60 = 0$
 $-5(x + 3)(5x - 4) = 0$
 $x = -3, \frac{4}{5}$
- $-4x^2 + 324 = 0$
 $-4(x - 9)(x + 9) = 0$
 $x = 9, -9$
- $15x^2 + 70x + 40 = 0$
 $5(x + 4)(3x + 2) = 0$
 $x = -4, -\frac{2}{3}$