

Solving Quadratic Equations (F)

Name: _____

Date: _____

Solve each equation for x.

1. $-16x^2 + 100x - 100 = 0$

11. $16x^2 + 180x + 324 = 0$

2. $2x^2 - 14x + 12 = 0$

12. $5x^2 + 70x + 240 = 0$

3. $20x^2 - 20x - 75 = 0$

13. $8x^2 - 30x - 8 = 0$

4. $-4x^2 - 22x + 12 = 0$

14. $-3x^2 + 27x - 24 = 0$

5. $15x^2 - 35x - 30 = 0$

15. $8x^2 + 30x + 18 = 0$

6. $4x^2 + 38x + 18 = 0$

16. $20x^2 - 95x - 150 = 0$

7. $-12x^2 + 117x - 168 = 0$

17. $6x^2 - 20x - 50 = 0$

8. $5x^2 + 70x + 225 = 0$

18. $12x^2 - 28x - 24 = 0$

9. $9x^2 - 75x + 126 = 0$

19. $-20x^2 - 160x - 315 = 0$

10. $15x^2 + 125x + 210 = 0$

20. $8x^2 - 14x - 30 = 0$

Solving Quadratic Equations (F) Answers

Name: _____

Date: _____

Solve each equation for x.

- $-16x^2 + 100x - 100 = 0$
 $-4(4x - 5)(x - 5) = 0$
 $x = 1\frac{1}{4}, 5$
- $2x^2 - 14x + 12 = 0$
 $2(x - 6)(x - 1) = 0$
 $x = 6, 1$
- $20x^2 - 20x - 75 = 0$
 $5(2x + 3)(2x - 5) = 0$
 $x = -1\frac{1}{2}, 2\frac{1}{2}$
- $-4x^2 - 22x + 12 = 0$
 $-2(2x - 1)(x + 6) = 0$
 $x = \frac{1}{2}, -6$
- $15x^2 - 35x - 30 = 0$
 $5(3x + 2)(x - 3) = 0$
 $x = -\frac{2}{3}, 3$
- $4x^2 + 38x + 18 = 0$
 $2(2x + 1)(x + 9) = 0$
 $x = -\frac{1}{2}, -9$
- $-12x^2 + 117x - 168 = 0$
 $-3(x - 8)(4x - 7) = 0$
 $x = 8, 1\frac{3}{4}$
- $5x^2 + 70x + 225 = 0$
 $5(x + 9)(x + 5) = 0$
 $x = -9, -5$
- $9x^2 - 75x + 126 = 0$
 $3(x - 6)(3x - 7) = 0$
 $x = 6, 2\frac{1}{3}$
- $15x^2 + 125x + 210 = 0$
 $5(x + 6)(3x + 7) = 0$
 $x = -6, -2\frac{1}{3}$
- $16x^2 + 180x + 324 = 0$
 $4(4x + 9)(x + 9) = 0$
 $x = -2\frac{1}{4}, -9$
- $5x^2 + 70x + 240 = 0$
 $5(x + 6)(x + 8) = 0$
 $x = -6, -8$
- $8x^2 - 30x - 8 = 0$
 $2(x - 4)(4x + 1) = 0$
 $x = 4, -\frac{1}{4}$
- $-3x^2 + 27x - 24 = 0$
 $-3(x - 8)(x - 1) = 0$
 $x = 8, 1$
- $8x^2 + 30x + 18 = 0$
 $2(x + 3)(4x + 3) = 0$
 $x = -3, -\frac{3}{4}$
- $20x^2 - 95x - 150 = 0$
 $5(4x + 5)(x - 6) = 0$
 $x = -1\frac{1}{4}, 6$
- $6x^2 - 20x - 50 = 0$
 $2(3x + 5)(x - 5) = 0$
 $x = -1\frac{2}{3}, 5$
- $12x^2 - 28x - 24 = 0$
 $4(3x + 2)(x - 3) = 0$
 $x = -\frac{2}{3}, 3$
- $-20x^2 - 160x - 315 = 0$
 $-5(2x + 9)(2x + 7) = 0$
 $x = -4\frac{1}{2}, -3\frac{1}{2}$
- $8x^2 - 14x - 30 = 0$
 $2(x - 3)(4x + 5) = 0$
 $x = 3, -1\frac{1}{4}$