

Solving Quadratic Equations (F)

Name: _____

Date: _____

Solve each equation for x.

1. $2x^2 + 15x + 18 = 0$

11. $3x^2 - 17x + 24 = 0$

2. $4x^2 - 11x - 20 = 0$

12. $4x^2 + 27x + 35 = 0$

3. $2x^2 + 15x + 27 = 0$

13. $4x^2 + 32x + 63 = 0$

4. $4x^2 + 11x + 6 = 0$

14. $4x^2 - 12x + 5 = 0$

5. $x^2 - 14x + 48 = 0$

15. $4x^2 - x - 18 = 0$

6. $4x^2 + 28x + 45 = 0$

16. $x^2 - 5x - 6 = 0$

7. $2x^2 + 13x + 15 = 0$

17. $2x^2 - x - 36 = 0$

8. $2x^2 - 13x + 15 = 0$

18. $x^2 + x - 20 = 0$

9. $2x^2 - 15x + 18 = 0$

19. $3x^2 + 5x - 2 = 0$

10. $2x^2 - 23x + 56 = 0$

20. $3x^2 + 13x - 30 = 0$

Solving Quadratic Equations (F) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $2x^2 + 15x + 18 = 0$
 $(2x + 3)(x + 6) = 0$
 $x = -1\frac{1}{2}, -6$

2. $4x^2 - 11x - 20 = 0$
 $(4x + 5)(x - 4) = 0$
 $x = -1\frac{1}{4}, 4$

3. $2x^2 + 15x + 27 = 0$
 $(x + 3)(2x + 9) = 0$
 $x = -3, -4\frac{1}{2}$

4. $4x^2 + 11x + 6 = 0$
 $(x + 2)(4x + 3) = 0$
 $x = -2, -\frac{3}{4}$

5. $x^2 - 14x + 48 = 0$
 $(x - 8)(x - 6) = 0$
 $x = 8, 6$

6. $4x^2 + 28x + 45 = 0$
 $(2x + 9)(2x + 5) = 0$
 $x = -4\frac{1}{2}, -2\frac{1}{2}$

7. $2x^2 + 13x + 15 = 0$
 $(2x + 3)(x + 5) = 0$
 $x = -1\frac{1}{2}, -5$

8. $2x^2 - 13x + 15 = 0$
 $(2x - 3)(x - 5) = 0$
 $x = 1\frac{1}{2}, 5$

9. $2x^2 - 15x + 18 = 0$
 $(2x - 3)(x - 6) = 0$
 $x = 1\frac{1}{2}, 6$

10. $2x^2 - 23x + 56 = 0$
 $(2x - 7)(x - 8) = 0$
 $x = 3\frac{1}{2}, 8$

11. $3x^2 - 17x + 24 = 0$
 $(3x - 8)(x - 3) = 0$
 $x = 2\frac{2}{3}, 3$

12. $4x^2 + 27x + 35 = 0$
 $(4x + 7)(x + 5) = 0$
 $x = -1\frac{3}{4}, -5$

13. $4x^2 + 32x + 63 = 0$
 $(2x + 9)(2x + 7) = 0$
 $x = -4\frac{1}{2}, -3\frac{1}{2}$

14. $4x^2 - 12x + 5 = 0$
 $(2x - 1)(2x - 5) = 0$
 $x = \frac{1}{2}, 2\frac{1}{2}$

15. $4x^2 - x - 18 = 0$
 $(4x - 9)(x + 2) = 0$
 $x = 2\frac{1}{4}, -2$

16. $x^2 - 5x - 6 = 0$
 $(x - 6)(x + 1) = 0$
 $x = 6, -1$

17. $2x^2 - x - 36 = 0$
 $(x + 4)(2x - 9) = 0$
 $x = -4, 4\frac{1}{2}$

18. $x^2 + x - 20 = 0$
 $(x + 5)(x - 4) = 0$
 $x = -5, 4$

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

20. $3x^2 + 13x - 30 = 0$
 $(3x - 5)(x + 6) = 0$
 $x = 1\frac{2}{3}, -6$