

Solving Quadratic Equations (F)

Name: _____

Date: _____

Solve each equation for x.

1. $3x^2 + 34x + 63 = 0$

11. $5x^2 + x - 18 = 0$

2. $3x^2 - 20x - 63 = 0$

12. $4x^2 - 24x + 27 = 0$

3. $3x^2 - 8x + 4 = 0$

13. $5x^2 + 44x + 32 = 0$

4. $2x^2 + 5x - 42 = 0$

14. $4x^2 - 27x + 18 = 0$

5. $4x^2 + 16x + 15 = 0$

15. $3x^2 + 17x + 24 = 0$

6. $2x^2 + 13x - 24 = 0$

16. $x^2 + 4x + 3 = 0$

7. $2x^2 + 7x - 30 = 0$

17. $4x^2 + 36x + 81 = 0$

8. $2x^2 - 7x + 5 = 0$

18. $3x^2 + 11x - 42 = 0$

9. $5x^2 - 6x - 27 = 0$

19. $2x^2 + 21x + 49 = 0$

10. $3x^2 + 19x + 20 = 0$

20. $x^2 + 13x + 36 = 0$

Solving Quadratic Equations (F) Answers

Name: _____

Date: _____

Solve each equation for x.

- $3x^2 + 34x + 63 = 0$
 $(3x + 7)(x + 9) = 0$
 $x = -2\frac{1}{3}, -9$
- $3x^2 - 20x - 63 = 0$
 $(3x + 7)(x - 9) = 0$
 $x = -2\frac{1}{3}, 9$
- $3x^2 - 8x + 4 = 0$
 $(3x - 2)(x - 2) = 0$
 $x = \frac{2}{3}, 2$
- $2x^2 + 5x - 42 = 0$
 $(x + 6)(2x - 7) = 0$
 $x = -6, 3\frac{1}{2}$
- $4x^2 + 16x + 15 = 0$
 $(2x + 3)(2x + 5) = 0$
 $x = -1\frac{1}{2}, -2\frac{1}{2}$
- $2x^2 + 13x - 24 = 0$
 $(x + 8)(2x - 3) = 0$
 $x = -8, 1\frac{1}{2}$
- $2x^2 + 7x - 30 = 0$
 $(x + 6)(2x - 5) = 0$
 $x = -6, 2\frac{1}{2}$
- $2x^2 - 7x + 5 = 0$
 $(2x - 5)(x - 1) = 0$
 $x = 2\frac{1}{2}, 1$
- $5x^2 - 6x - 27 = 0$
 $(x - 3)(5x + 9) = 0$
 $x = 3, -1\frac{4}{5}$
- $3x^2 + 19x + 20 = 0$
 $(x + 5)(3x + 4) = 0$
 $x = -5, -1\frac{1}{3}$
- $5x^2 + x - 18 = 0$
 $(x + 2)(5x - 9) = 0$
 $x = -2, 1\frac{4}{5}$
- $4x^2 - 24x + 27 = 0$
 $(2x - 3)(2x - 9) = 0$
 $x = 1\frac{1}{2}, 4\frac{1}{2}$
- $5x^2 + 44x + 32 = 0$
 $(x + 8)(5x + 4) = 0$
 $x = -8, -\frac{4}{5}$
- $4x^2 - 27x + 18 = 0$
 $(4x - 3)(x - 6) = 0$
 $x = \frac{3}{4}, 6$
- $3x^2 + 17x + 24 = 0$
 $(x + 3)(3x + 8) = 0$
 $x = -3, -2\frac{2}{3}$
- $x^2 + 4x + 3 = 0$
 $(x + 1)(x + 3) = 0$
 $x = -1, -3$
- $4x^2 + 36x + 81 = 0$
 $(2x + 9)(2x + 9) = (2x + 9)^2 = 0$
 $x = -4\frac{1}{2}$
- $3x^2 + 11x - 42 = 0$
 $(x + 6)(3x - 7) = 0$
 $x = -6, 2\frac{1}{3}$
- $2x^2 + 21x + 49 = 0$
 $(x + 7)(2x + 7) = 0$
 $x = -7, -3\frac{1}{2}$
- $x^2 + 13x + 36 = 0$
 $(x + 9)(x + 4) = 0$
 $x = -9, -4$