

Solving Quadratic Equations (E)

Name: _____

Date: _____

Solve each equation for x.

1. $-x^2 - 2x + 24 = 0$

11. $2x^2 - 3x + 1 = 0$

2. $-4x^2 - 7x - 3 = 0$

12. $3x^2 + 4x - 4 = 0$

3. $4x^2 + 41x + 45 = 0$

13. $-2x^2 + 23x - 56 = 0$

4. $-3x^2 + 4x + 7 = 0$

14. $4x^2 + 31x - 45 = 0$

5. $-3x^2 - 4x + 7 = 0$

15. $-3x^2 - 17x + 28 = 0$

6. $4x^2 - 4x - 35 = 0$

16. $-2x^2 + 9x + 5 = 0$

7. $2x^2 + 11x - 21 = 0$

17. $-4x^2 + 35x - 49 = 0$

8. $-x^2 + 11x - 24 = 0$

18. $2x^2 - 3x - 20 = 0$

9. $-4x^2 - 29x - 30 = 0$

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

10. $3x^2 - 5x - 12 = 0$

20. $-4x^2 + 19x - 12 = 0$

Solving Quadratic Equations (E) Answers

Name: _____

Date: _____

Solve each equation for x.

- $-x^2 - 2x + 24 = 0$
 $-(x - 4)(x + 6) = 0$
 $x = 4, -6$
- $-4x^2 - 7x - 3 = 0$
 $-(4x + 3)(x + 1) = 0$
 $x = -\frac{3}{4}, -1$
- $4x^2 + 41x + 45 = 0$
 $(x + 9)(4x + 5) = 0$
 $x = -9, -1\frac{1}{4}$
- $-3x^2 + 4x + 7 = 0$
 $-(3x - 7)(x + 1) = 0$
 $x = 2\frac{1}{3}, -1$
- $-3x^2 - 4x + 7 = 0$
 $-(x - 1)(3x + 7) = 0$
 $x = 1, -2\frac{1}{3}$
- $4x^2 - 4x - 35 = 0$
 $(2x - 7)(2x + 5) = 0$
 $x = 3\frac{1}{2}, -2\frac{1}{2}$
- $2x^2 + 11x - 21 = 0$
 $(x + 7)(2x - 3) = 0$
 $x = -7, 1\frac{1}{2}$
- $-x^2 + 11x - 24 = 0$
 $-(x - 8)(x - 3) = 0$
 $x = 8, 3$
- $-4x^2 - 29x - 30 = 0$
 $-(x + 6)(4x + 5) = 0$
 $x = -6, -1\frac{1}{4}$
- $3x^2 - 5x - 12 = 0$
 $(x - 3)(3x + 4) = 0$
 $x = 3, -1\frac{1}{3}$
- $2x^2 - 3x + 1 = 0$
 $(x - 1)(2x - 1) = 0$
 $x = 1, \frac{1}{2}$
- $3x^2 + 4x - 4 = 0$
 $(3x - 2)(x + 2) = 0$
 $x = \frac{2}{3}, -2$
- $-2x^2 + 23x - 56 = 0$
 $-(2x - 7)(x - 8) = 0$
 $x = 3\frac{1}{2}, 8$
- $4x^2 + 31x - 45 = 0$
 $(x + 9)(4x - 5) = 0$
 $x = -9, 1\frac{1}{4}$
- $-3x^2 - 17x + 28 = 0$
 $-(x + 7)(3x - 4) = 0$
 $x = -7, 1\frac{1}{3}$
- $-2x^2 + 9x + 5 = 0$
 $-(2x + 1)(x - 5) = 0$
 $x = -\frac{1}{2}, 5$
- $-4x^2 + 35x - 49 = 0$
 $-(x - 7)(4x - 7) = 0$
 $x = 7, 1\frac{3}{4}$
- $2x^2 - 3x - 20 = 0$
 $(x - 4)(2x + 5) = 0$
 $x = 4, -2\frac{1}{2}$
- $-3x^2 + 5x + 2 = 0$
 $-(x - 2)(3x + 1) = 0$
 $x = 2, -\frac{1}{3}$
- $-4x^2 + 19x - 12 = 0$
 $-(4x - 3)(x - 4) = 0$
 $x = \frac{3}{4}, 4$