

Solving Quadratic Equations (E)

Name: _____

Date: _____

Solve each equation for x.

1. $4x^2 + 35x + 24 = 0$

11. $4x^2 + 16x + 7 = 0$

2. $8x^2 - 26x - 7 = 0$

12. $8x^2 - 69x + 40 = 0$

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

13. $3x^2 - 17x + 10 = 0$

4. $9x^2 + 6x + 1 = 0$

14. $6x^2 - 19x - 20 = 0$

5. $6x^2 + 55x + 9 = 0$

15. $3x^2 - 19x - 14 = 0$

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

16. $6x^2 - 13x - 63 = 0$

7. $6x^2 + 7x + 1 = 0$

17. $6x^2 - 25x - 25 = 0$

8. $6x^2 - 5x - 4 = 0$

18. $6x^2 + 31x + 35 = 0$

9. $8x^2 - 49x + 6 = 0$

19. $8x^2 + 6x + 1 = 0$

10. $9x^2 - 65x + 14 = 0$

20. $6x^2 + 13x - 5 = 0$

Solving Quadratic Equations (E) Answers

Name: _____

Date: _____

Solve each equation for x.

- $4x^2 + 35x + 24 = 0$
 $(4x + 3)(x + 8) = 0$
 $x = -\frac{3}{4}, -8$
- $8x^2 - 26x - 7 = 0$
 $(4x + 1)(2x - 7) = 0$
 $x = -\frac{1}{4}, 3\frac{1}{2}$
- $2x^2 - 7x + 3 = 0$
 $(x - 3)(2x - 1) = 0$
 $x = 3, \frac{1}{2}$
- $9x^2 + 6x + 1 = 0$
 $(3x + 1)(3x + 1) = (3x + 1)^2 = 0$
 $x = -\frac{1}{3}$
- $6x^2 + 55x + 9 = 0$
 $(6x + 1)(x + 9) = 0$
 $x = -\frac{1}{6}, -9$
- $4x^2 - 28x + 45 = 0$
 $(2x - 9)(2x - 5) = 0$
 $x = 4\frac{1}{2}, 2\frac{1}{2}$
- $6x^2 + 7x + 1 = 0$
 $(6x + 1)(x + 1) = 0$
 $x = -\frac{1}{6}, -1$
- $6x^2 - 5x - 4 = 0$
 $(2x + 1)(3x - 4) = 0$
 $x = -\frac{1}{2}, 1\frac{1}{3}$
- $8x^2 - 49x + 6 = 0$
 $(8x - 1)(x - 6) = 0$
 $x = \frac{1}{8}, 6$
- $9x^2 - 65x + 14 = 0$
 $(x - 7)(9x - 2) = 0$
 $x = 7, \frac{2}{9}$
- $4x^2 + 16x + 7 = 0$
 $(2x + 7)(2x + 1) = 0$
 $x = -3\frac{1}{2}, -\frac{1}{2}$
- $8x^2 - 69x + 40 = 0$
 $(8x - 5)(x - 8) = 0$
 $x = \frac{5}{8}, 8$
- $3x^2 - 17x + 10 = 0$
 $(3x - 2)(x - 5) = 0$
 $x = \frac{2}{3}, 5$
- $6x^2 - 19x - 20 = 0$
 $(6x + 5)(x - 4) = 0$
 $x = -\frac{5}{6}, 4$
- $3x^2 - 19x - 14 = 0$
 $(3x + 2)(x - 7) = 0$
 $x = -\frac{2}{3}, 7$
- $6x^2 - 13x - 63 = 0$
 $(2x - 9)(3x + 7) = 0$
 $x = 4\frac{1}{2}, -2\frac{1}{3}$
- $6x^2 - 25x - 25 = 0$
 $(x - 5)(6x + 5) = 0$
 $x = 5, -\frac{5}{6}$
- $6x^2 + 31x + 35 = 0$
 $(2x + 7)(3x + 5) = 0$
 $x = -3\frac{1}{2}, -1\frac{2}{3}$
- $8x^2 + 6x + 1 = 0$
 $(4x + 1)(2x + 1) = 0$
 $x = -\frac{1}{4}, -\frac{1}{2}$
- $6x^2 + 13x - 5 = 0$
 $(3x - 1)(2x + 5) = 0$
 $x = \frac{1}{3}, -2\frac{1}{2}$