

Solving Quadratic Equations (B)

Name: _____

Date: _____

Solve each equation for x.

1. $9x^2 - 77x + 40 = 0$

11. $8x^2 - 5x - 3 = 0$

2. $24x^2 + 19x - 9 = 0$

12. $35x^2 - 71x + 24 = 0$

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

13. $16x^2 + 82x + 45 = 0$

4. $48x^2 - 22x - 5 = 0$

14. $18x^2 - 13x + 2 = 0$

5. $16x^2 + 24x - 27 = 0$

15. $16x^2 - 1 = 0$

6. $32x^2 + 20x - 25 = 0$

16. $12x^2 - 19x - 21 = 0$

7. $24x^2 + 11x + 1 = 0$

17. $27x^2 - 30x + 7 = 0$

8. $42x^2 - 61x + 14 = 0$

18. $30x^2 - 19x - 5 = 0$

9. $14x^2 - 9x + 1 = 0$

19. $36x^2 - 12x + 1 = 0$

10. $18x^2 - 25x + 8 = 0$

20. $21x^2 + 20x - 9 = 0$

Solving Quadratic Equations (B) Answers

Name: _____

Date: _____

Solve each equation for x.

- $9x^2 - 77x + 40 = 0$
 $(x - 8)(9x - 5) = 0$
 $x = 8, \frac{5}{9}$
- $24x^2 + 19x - 9 = 0$
 $(3x - 1)(8x + 9) = 0$
 $x = \frac{1}{3}, -1\frac{1}{8}$
- $15x^2 + 2x - 24 = 0$
 $(3x + 4)(5x - 6) = 0$
 $x = -1\frac{1}{3}, 1\frac{1}{5}$
- $48x^2 - 22x - 5 = 0$
 $(6x + 1)(8x - 5) = 0$
 $x = -\frac{1}{6}, \frac{5}{8}$
- $16x^2 + 24x - 27 = 0$
 $(4x - 3)(4x + 9) = 0$
 $x = \frac{3}{4}, -2\frac{1}{4}$
- $32x^2 + 20x - 25 = 0$
 $(8x - 5)(4x + 5) = 0$
 $x = \frac{5}{8}, -1\frac{1}{4}$
- $24x^2 + 11x + 1 = 0$
 $(3x + 1)(8x + 1) = 0$
 $x = -\frac{1}{3}, -\frac{1}{8}$
- $42x^2 - 61x + 14 = 0$
 $(7x - 2)(6x - 7) = 0$
 $x = \frac{2}{7}, 1\frac{1}{6}$
- $14x^2 - 9x + 1 = 0$
 $(2x - 1)(7x - 1) = 0$
 $x = \frac{1}{2}, \frac{1}{7}$
- $18x^2 - 25x + 8 = 0$
 $(9x - 8)(2x - 1) = 0$
 $x = \frac{8}{9}, \frac{1}{2}$
- $8x^2 - 5x - 3 = 0$
 $(8x + 3)(x - 1) = 0$
 $x = -\frac{3}{8}, 1$
- $35x^2 - 71x + 24 = 0$
 $(5x - 8)(7x - 3) = 0$
 $x = 1\frac{3}{5}, \frac{3}{7}$
- $16x^2 + 82x + 45 = 0$
 $(8x + 5)(2x + 9) = 0$
 $x = -\frac{5}{8}, -4\frac{1}{2}$
- $18x^2 - 13x + 2 = 0$
 $(9x - 2)(2x - 1) = 0$
 $x = \frac{2}{9}, \frac{1}{2}$
- $16x^2 - 1 = 0$
 $(4x + 1)(4x - 1) = 0$
 $x = -\frac{1}{4}, \frac{1}{4}$
- $12x^2 - 19x - 21 = 0$
 $(4x + 3)(3x - 7) = 0$
 $x = -\frac{3}{4}, 2\frac{1}{3}$
- $27x^2 - 30x + 7 = 0$
 $(3x - 1)(9x - 7) = 0$
 $x = \frac{1}{3}, \frac{7}{9}$
- $30x^2 - 19x - 5 = 0$
 $(5x + 1)(6x - 5) = 0$
 $x = -\frac{1}{5}, \frac{5}{6}$
- $36x^2 - 12x + 1 = 0$
 $(6x - 1)(6x - 1) = (6x - 1)^2 = 0$
 $x = \frac{1}{6}$
- $21x^2 + 20x - 9 = 0$
 $(7x + 9)(3x - 1) = 0$
 $x = -1\frac{2}{7}, \frac{1}{3}$