

Solving Quadratic Equations (I)

Name: _____

Date: _____

Solve each equation for x.

1. $4x^2 - 29x + 45 = 0$

11. $3x^2 + 4x - 7 = 0$

2. $5x^2 + 38x + 21 = 0$

12. $5x^2 + 54x + 81 = 0$

3. $5x^2 - 23x - 10 = 0$

13. $2x^2 + 9x - 81 = 0$

4. $4x^2 + 20x + 25 = 0$

14. $x^2 - 7x + 10 = 0$

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

15. $2x^2 - 5x - 12 = 0$

6. $2x^2 - 21x + 54 = 0$

16. $2x^2 - 9x - 35 = 0$

7. $3x^2 + 29x + 18 = 0$

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

8. $3x^2 + 17x + 20 = 0$

18. $4x^2 + 23x - 6 = 0$

9. $4x^2 + 8x - 5 = 0$

19. $x^2 + 6x - 7 = 0$

10. $4x^2 - 16x - 9 = 0$

20. $4x^2 + 4x - 63 = 0$

Solving Quadratic Equations (I) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $4x^2 - 29x + 45 = 0$
 $(4x - 9)(x - 5) = 0$
 $x = 2\frac{1}{4}, 5$

2. $5x^2 + 38x + 21 = 0$
 $(5x + 3)(x + 7) = 0$
 $x = -\frac{3}{5}, -7$

3. $5x^2 - 23x - 10 = 0$
 $(5x + 2)(x - 5) = 0$
 $x = -\frac{2}{5}, 5$

4. $4x^2 + 20x + 25 = 0$
 $(2x + 5)(2x + 5) = (2x + 5)^2 = 0$
 $x = -2\frac{1}{2}$

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

6. $2x^2 - 21x + 54 = 0$
 $(2x - 9)(x - 6) = 0$
 $x = 4\frac{1}{2}, 6$

7. $3x^2 + 29x + 18 = 0$
 $(x + 9)(3x + 2) = 0$
 $x = -9, -\frac{2}{3}$

8. $3x^2 + 17x + 20 = 0$
 $(x + 4)(3x + 5) = 0$
 $x = -4, -1\frac{2}{3}$

9. $4x^2 + 8x - 5 = 0$
 $(2x - 1)(2x + 5) = 0$
 $x = \frac{1}{2}, -2\frac{1}{2}$

10. $4x^2 - 16x - 9 = 0$
 $(2x - 9)(2x + 1) = 0$
 $x = 4\frac{1}{2}, -\frac{1}{2}$

11. $3x^2 + 4x - 7 = 0$
 $(3x + 7)(x - 1) = 0$
 $x = -2\frac{1}{3}, 1$

12. $5x^2 + 54x + 81 = 0$
 $(5x + 9)(x + 9) = 0$
 $x = -1\frac{4}{5}, -9$

13. $2x^2 + 9x - 81 = 0$
 $(x + 9)(2x - 9) = 0$
 $x = -9, 4\frac{1}{2}$

14. $x^2 - 7x + 10 = 0$
 $(x - 2)(x - 5) = 0$
 $x = 2, 5$

15. $2x^2 - 5x - 12 = 0$
 $(x - 4)(2x + 3) = 0$
 $x = 4, -1\frac{1}{2}$

16. $2x^2 - 9x - 35 = 0$
 $(2x + 5)(x - 7) = 0$
 $x = -2\frac{1}{2}, 7$

17. $4x^2 + 35x + 49 = 0$
 $(4x + 7)(x + 7) = 0$
 $x = -1\frac{3}{4}, -7$

18. $4x^2 + 23x - 6 = 0$
 $(x + 6)(4x - 1) = 0$
 $x = -6, \frac{1}{4}$

19. $x^2 + 6x - 7 = 0$
 $(x + 7)(x - 1) = 0$
 $x = -7, 1$

20. $4x^2 + 4x - 63 = 0$
 $(2x - 7)(2x + 9) = 0$
 $x = 3\frac{1}{2}, -4\frac{1}{2}$