

Solving Quadratic Equations (A)

Name: _____

Date: _____

Solve each equation for x.

1. $-4x^2 + 30x + 54 = 0$

11. $-12x^2 + 12x + 45 = 0$

2. $-9x^2 + 15x + 84 = 0$

12. $8x^2 + 10x - 42 = 0$

3. $12x^2 - 52x - 40 = 0$

13. $-6x^2 + 51x - 108 = 0$

4. $3x^2 - 39x + 120 = 0$

14. $-2x^2 - 2x + 84 = 0$

5. $12x^2 - 36x + 15 = 0$

15. $9x^2 + 57x - 120 = 0$

6. $-16x^2 - 16x + 12 = 0$

16. $-12x^2 - 80x - 48 = 0$

7. $-20x^2 - 65x - 15 = 0$

17. $6x^2 - 21x + 9 = 0$

8. $10x^2 - 5x - 75 = 0$

18. $-15x^2 - 140x - 45 = 0$

9. $8x^2 + 76x + 168 = 0$

19. $3x^2 - 108 = 0$

10. $-10x^2 - 35x + 20 = 0$

20. $8x^2 - 24x + 10 = 0$

Solving Quadratic Equations (A) Answers

Name: _____

Date: _____

Solve each equation for x.

- $-4x^2 + 30x + 54 = 0$
 $-2(2x + 3)(x - 9) = 0$
 $x = -1\frac{1}{2}, 9$
- $-9x^2 + 15x + 84 = 0$
 $-3(x - 4)(3x + 7) = 0$
 $x = 4, -2\frac{1}{3}$
- $12x^2 - 52x - 40 = 0$
 $4(3x + 2)(x - 5) = 0$
 $x = -\frac{2}{3}, 5$
- $3x^2 - 39x + 120 = 0$
 $3(x - 5)(x - 8) = 0$
 $x = 5, 8$
- $12x^2 - 36x + 15 = 0$
 $3(2x - 1)(2x - 5) = 0$
 $x = \frac{1}{2}, 2\frac{1}{2}$
- $-16x^2 - 16x + 12 = 0$
 $-4(2x - 1)(2x + 3) = 0$
 $x = \frac{1}{2}, -1\frac{1}{2}$
- $-20x^2 - 65x - 15 = 0$
 $-5(x + 3)(4x + 1) = 0$
 $x = -3, -\frac{1}{4}$
- $10x^2 - 5x - 75 = 0$
 $5(x - 3)(2x + 5) = 0$
 $x = 3, -2\frac{1}{2}$
- $8x^2 + 76x + 168 = 0$
 $4(2x + 7)(x + 6) = 0$
 $x = -3\frac{1}{2}, -6$
- $-10x^2 - 35x + 20 = 0$
 $-5(x + 4)(2x - 1) = 0$
 $x = -4, \frac{1}{2}$
- $-12x^2 + 12x + 45 = 0$
 $-3(2x - 5)(2x + 3) = 0$
 $x = 2\frac{1}{2}, -1\frac{1}{2}$
- $8x^2 + 10x - 42 = 0$
 $2(4x - 7)(x + 3) = 0$
 $x = 1\frac{3}{4}, -3$
- $-6x^2 + 51x - 108 = 0$
 $-3(2x - 9)(x - 4) = 0$
 $x = 4\frac{1}{2}, 4$
- $-2x^2 - 2x + 84 = 0$
 $-2(x - 6)(x + 7) = 0$
 $x = 6, -7$
- $9x^2 + 57x - 120 = 0$
 $3(x + 8)(3x - 5) = 0$
 $x = -8, 1\frac{2}{3}$
- $-12x^2 - 80x - 48 = 0$
 $-4(x + 6)(3x + 2) = 0$
 $x = -6, -\frac{2}{3}$
- $6x^2 - 21x + 9 = 0$
 $3(x - 3)(2x - 1) = 0$
 $x = 3, \frac{1}{2}$
- $-15x^2 - 140x - 45 = 0$
 $-5(3x + 1)(x + 9) = 0$
 $x = -\frac{1}{3}, -9$
- $3x^2 - 108 = 0$
 $3(x - 6)(x + 6) = 0$
 $x = 6, -6$
- $8x^2 - 24x + 10 = 0$
 $2(2x - 1)(2x - 5) = 0$
 $x = \frac{1}{2}, 2\frac{1}{2}$