

Solving Quadratic Equations (A)

Name: _____

Date: _____

Solve each equation for x.

1. $4x^2 - 48x + 128 = 0$

11. $4x^2 + 52x + 168 = 0$

2. $2x^2 - 28x + 96 = 0$

12. $-3x^2 - 33x - 90 = 0$

3. $4x^2 - 324 = 0$

13. $-5x^2 + 35x + 40 = 0$

4. $2x^2 + 12x - 54 = 0$

14. $-4x^2 + 12x + 72 = 0$

5. $2x^2 - 2x - 40 = 0$

15. $4x^2 - 12x - 16 = 0$

6. $-2x^2 + 26x - 72 = 0$

16. $-5x^2 - 60x - 180 = 0$

7. $4x^2 - 60x + 216 = 0$

17. $4x^2 - 64 = 0$

8. $-3x^2 - 39x - 108 = 0$

18. $-2x^2 - 30x - 112 = 0$

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

19. $3x^2 + 3x - 126 = 0$

10. $-3x^2 + 9x + 162 = 0$

20. $3x^2 - 27x + 54 = 0$

Solving Quadratic Equations (A) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $4x^2 - 48x + 128 = 0$
 $4(x - 8)(x - 4) = 0$
 $x = 8, 4$

2. $2x^2 - 28x + 96 = 0$
 $2(x - 8)(x - 6) = 0$
 $x = 8, 6$

3. $4x^2 - 324 = 0$
 $4(x + 9)(x - 9) = 0$
 $x = -9, 9$

4. $2x^2 + 12x - 54 = 0$
 $2(x - 3)(x + 9) = 0$
 $x = 3, -9$

5. $2x^2 - 2x - 40 = 0$
 $2(x + 4)(x - 5) = 0$
 $x = -4, 5$

6. $-2x^2 + 26x - 72 = 0$
 $-2(x - 9)(x - 4) = 0$
 $x = 9, 4$

7. $4x^2 - 60x + 216 = 0$
 $4(x - 6)(x - 9) = 0$
 $x = 6, 9$

8. $-3x^2 - 39x - 108 = 0$
 $-3(x + 9)(x + 4) = 0$
 $x = -9, -4$

9. $-2x^2 - 2x + 40 = 0$
 $-2(x + 5)(x - 4) = 0$
 $x = -5, 4$

10. $-3x^2 + 9x + 162 = 0$
 $-3(x + 6)(x - 9) = 0$
 $x = -6, 9$

11. $4x^2 + 52x + 168 = 0$
 $4(x + 6)(x + 7) = 0$
 $x = -6, -7$

12. $-3x^2 - 33x - 90 = 0$
 $-3(x + 5)(x + 6) = 0$
 $x = -5, -6$

13. $-5x^2 + 35x + 40 = 0$
 $-5(x + 1)(x - 8) = 0$
 $x = -1, 8$

14. $-4x^2 + 12x + 72 = 0$
 $-4(x - 6)(x + 3) = 0$
 $x = 6, -3$

15. $4x^2 - 12x - 16 = 0$
 $4(x + 1)(x - 4) = 0$
 $x = -1, 4$

16. $-5x^2 - 60x - 180 = 0$
 $-5(x + 6)(x + 6) = -5(x + 6)^2 = 0$
 $x = -6$

17. $4x^2 - 64 = 0$
 $4(x - 4)(x + 4) = 0$
 $x = 4, -4$

18. $-2x^2 - 30x - 112 = 0$
 $-2(x + 7)(x + 8) = 0$
 $x = -7, -8$

19. $3x^2 + 3x - 126 = 0$
 $3(x - 6)(x + 7) = 0$
 $x = 6, -7$

20. $3x^2 - 27x + 54 = 0$
 $3(x - 3)(x - 6) = 0$
 $x = 3, 6$