

# Solving Quadratic Equations (D)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Solve each equation for x.

1.  $-4x^2 + 4x + 168 = 0$

11.  $-3x^2 - 27x - 42 = 0$

2.  $4x^2 + 36x + 56 = 0$

12.  $5x^2 + 25x + 30 = 0$

3.  $3x^2 + 39x + 126 = 0$

13.  $4x^2 + 20x - 24 = 0$

4.  $-5x^2 - 85x - 360 = 0$

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

5.  $2x^2 + 4x - 16 = 0$

15.  $-3x^2 + 18x + 21 = 0$

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

16.  $-2x^2 - 22x - 48 = 0$

7.  $-2x^2 + 10x + 28 = 0$

17.  $-3x^2 + 33x - 84 = 0$

8.  $2x^2 - 18x + 36 = 0$

18.  $-5x^2 + 5x + 60 = 0$

9.  $2x^2 - 20x + 42 = 0$

19.  $-4x^2 - 16x + 48 = 0$

10.  $-4x^2 + 8x + 60 = 0$

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

# Solving Quadratic Equations (D) Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Solve each equation for x.

1.  $-4x^2 + 4x + 168 = 0$   
 $-4(x + 6)(x - 7) = 0$   
 $x = -6, 7$

2.  $4x^2 + 36x + 56 = 0$   
 $4(x + 7)(x + 2) = 0$   
 $x = -7, -2$

3.  $3x^2 + 39x + 126 = 0$   
 $3(x + 6)(x + 7) = 0$   
 $x = -6, -7$

4.  $-5x^2 - 85x - 360 = 0$   
 $-5(x + 8)(x + 9) = 0$   
 $x = -8, -9$

5.  $2x^2 + 4x - 16 = 0$   
 $2(x - 2)(x + 4) = 0$   
 $x = 2, -4$

6.  $2x^2 + 2x - 4 = 0$   
 $2(x - 1)(x + 2) = 0$   
 $x = 1, -2$

7.  $-2x^2 + 10x + 28 = 0$   
 $-2(x + 2)(x - 7) = 0$   
 $x = -2, 7$

8.  $2x^2 - 18x + 36 = 0$   
 $2(x - 3)(x - 6) = 0$   
 $x = 3, 6$

9.  $2x^2 - 20x + 42 = 0$   
 $2(x - 7)(x - 3) = 0$   
 $x = 7, 3$

10.  $-4x^2 + 8x + 60 = 0$   
 $-4(x + 3)(x - 5) = 0$   
 $x = -3, 5$

11.  $-3x^2 - 27x - 42 = 0$   
 $-3(x + 2)(x + 7) = 0$   
 $x = -2, -7$

12.  $5x^2 + 25x + 30 = 0$   
 $5(x + 2)(x + 3) = 0$   
 $x = -2, -3$

13.  $4x^2 + 20x - 24 = 0$   
 $4(x + 6)(x - 1) = 0$   
 $x = -6, 1$

14.  $2x^2 - 8x - 42 = 0$   
 $2(x - 7)(x + 3) = 0$   
 $x = 7, -3$

15.  $-3x^2 + 18x + 21 = 0$   
 $-3(x + 1)(x - 7) = 0$   
 $x = -1, 7$

16.  $-2x^2 - 22x - 48 = 0$   
 $-2(x + 3)(x + 8) = 0$   
 $x = -3, -8$

17.  $-3x^2 + 33x - 84 = 0$   
 $-3(x - 4)(x - 7) = 0$   
 $x = 4, 7$

18.  $-5x^2 + 5x + 60 = 0$   
 $-5(x - 4)(x + 3) = 0$   
 $x = 4, -3$

19.  $-4x^2 - 16x + 48 = 0$   
 $-4(x - 2)(x + 6) = 0$   
 $x = 2, -6$

20.  $-2x^2 + 8x + 24 = 0$   
 $-2(x + 2)(x - 6) = 0$   
 $x = -2, 6$