

# Solving Quadratic Equations (F)

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

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

Solve each equation for x.

1.  $4x^2 - 8x - 252 = 0$

11.  $-2x^2 + 128 = 0$

2.  $-3x^2 - 9x + 30 = 0$

12.  $-3x^2 + 48x - 189 = 0$

3.  $4x^2 + 8x - 12 = 0$

13.  $2x^2 - 14x - 16 = 0$

4.  $-3x^2 - 51x - 216 = 0$

14.  $2x^2 - 8x - 90 = 0$

5.  $4x^2 - 44x + 112 = 0$

15.  $4x^2 - 4x - 288 = 0$

6.  $-2x^2 + 20x - 18 = 0$

16.  $-3x^2 + 6x + 9 = 0$

7.  $-2x^2 - 22x - 36 = 0$

17.  $-2x^2 + 2x + 60 = 0$

8.  $5x^2 - 50x + 125 = 0$

18.  $-4x^2 + 20x + 144 = 0$

9.  $-3x^2 + 30x - 72 = 0$

19.  $4x^2 - 4x - 224 = 0$

10.  $-3x^2 + 108 = 0$

20.  $3x^2 - 48 = 0$

# Solving Quadratic Equations (F) Answers

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

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

Solve each equation for x.

- $4x^2 - 8x - 252 = 0$   
 $4(x - 9)(x + 7) = 0$   
 $x = 9, -7$
- $-3x^2 - 9x + 30 = 0$   
 $-3(x - 2)(x + 5) = 0$   
 $x = 2, -5$
- $4x^2 + 8x - 12 = 0$   
 $4(x + 3)(x - 1) = 0$   
 $x = -3, 1$
- $-3x^2 - 51x - 216 = 0$   
 $-3(x + 9)(x + 8) = 0$   
 $x = -9, -8$
- $4x^2 - 44x + 112 = 0$   
 $4(x - 4)(x - 7) = 0$   
 $x = 4, 7$
- $-2x^2 + 20x - 18 = 0$   
 $-2(x - 9)(x - 1) = 0$   
 $x = 9, 1$
- $-2x^2 - 22x - 36 = 0$   
 $-2(x + 9)(x + 2) = 0$   
 $x = -9, -2$
- $5x^2 - 50x + 125 = 0$   
 $5(x - 5)(x - 5) = 5(x - 5)^2 = 0$   
 $x = 5$
- $-3x^2 + 30x - 72 = 0$   
 $-3(x - 6)(x - 4) = 0$   
 $x = 6, 4$
- $-3x^2 + 108 = 0$   
 $-3(x - 6)(x + 6) = 0$   
 $x = 6, -6$
- $-2x^2 + 128 = 0$   
 $-2(x + 8)(x - 8) = 0$   
 $x = -8, 8$
- $-3x^2 + 48x - 189 = 0$   
 $-3(x - 9)(x - 7) = 0$   
 $x = 9, 7$
- $2x^2 - 14x - 16 = 0$   
 $2(x + 1)(x - 8) = 0$   
 $x = -1, 8$
- $2x^2 - 8x - 90 = 0$   
 $2(x + 5)(x - 9) = 0$   
 $x = -5, 9$
- $4x^2 - 4x - 288 = 0$   
 $4(x + 8)(x - 9) = 0$   
 $x = -8, 9$
- $-3x^2 + 6x + 9 = 0$   
 $-3(x - 3)(x + 1) = 0$   
 $x = 3, -1$
- $-2x^2 + 2x + 60 = 0$   
 $-2(x - 6)(x + 5) = 0$   
 $x = 6, -5$
- $-4x^2 + 20x + 144 = 0$   
 $-4(x + 4)(x - 9) = 0$   
 $x = -4, 9$
- $4x^2 - 4x - 224 = 0$   
 $4(x + 7)(x - 8) = 0$   
 $x = -7, 8$
- $3x^2 - 48 = 0$   
 $3(x - 4)(x + 4) = 0$   
 $x = 4, -4$