

# Solving Quadratic Equations (D)

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

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

Solve each equation for x.

1.  $6x^2 - 45x - 81 = 0$

11.  $8x^2 + 84x + 160 = 0$

2.  $-15x^2 + 50x + 240 = 0$

12.  $-10x^2 - 62x - 60 = 0$

3.  $10x^2 - 92x + 18 = 0$

13.  $-12x^2 + 76x + 288 = 0$

4.  $-25x^2 - 210x - 245 = 0$

14.  $-25x^2 + 120x + 25 = 0$

5.  $-20x^2 - 72x - 36 = 0$

15.  $-8x^2 - 108x - 324 = 0$

6.  $-8x^2 - 44x - 20 = 0$

16.  $-12x^2 - 15x - 3 = 0$

7.  $-9x^2 + 69x - 42 = 0$

17.  $25x^2 + 85x + 70 = 0$

8.  $-20x^2 - 176x - 252 = 0$

18.  $16x^2 + 164x + 180 = 0$

9.  $-16x^2 - 16x + 12 = 0$

19.  $-10x^2 + 2x + 36 = 0$

10.  $-3x^2 + 48x - 192 = 0$

20.  $-20x^2 + 156x - 216 = 0$

# Solving Quadratic Equations (D) Answers

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

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

Solve each equation for x.

- $6x^2 - 45x - 81 = 0$   
 $3(x - 9)(2x + 3) = 0$   
 $x = 9, -1\frac{1}{2}$
- $-15x^2 + 50x + 240 = 0$   
 $-5(3x + 8)(x - 6) = 0$   
 $x = -2\frac{2}{3}, 6$
- $10x^2 - 92x + 18 = 0$   
 $2(x - 9)(5x - 1) = 0$   
 $x = 9, \frac{1}{5}$
- $-25x^2 - 210x - 245 = 0$   
 $-5(x + 7)(5x + 7) = 0$   
 $x = -7, -1\frac{2}{5}$
- $-20x^2 - 72x - 36 = 0$   
 $-4(5x + 3)(x + 3) = 0$   
 $x = -\frac{3}{5}, -3$
- $-8x^2 - 44x - 20 = 0$   
 $-4(2x + 1)(x + 5) = 0$   
 $x = -\frac{1}{2}, -5$
- $-9x^2 + 69x - 42 = 0$   
 $-3(3x - 2)(x - 7) = 0$   
 $x = \frac{2}{3}, 7$
- $-20x^2 - 176x - 252 = 0$   
 $-4(5x + 9)(x + 7) = 0$   
 $x = -1\frac{4}{5}, -7$
- $-16x^2 - 16x + 12 = 0$   
 $-4(2x - 1)(2x + 3) = 0$   
 $x = \frac{1}{2}, -1\frac{1}{2}$
- $-3x^2 + 48x - 192 = 0$   
 $-3(x - 8)(x - 8) = -3(x - 8)^2 = 0$   
 $x = 8$
- $8x^2 + 84x + 160 = 0$   
 $4(x + 8)(2x + 5) = 0$   
 $x = -8, -2\frac{1}{2}$
- $-10x^2 - 62x - 60 = 0$   
 $-2(x + 5)(5x + 6) = 0$   
 $x = -5, -1\frac{1}{5}$
- $-12x^2 + 76x + 288 = 0$   
 $-4(x - 9)(3x + 8) = 0$   
 $x = 9, -2\frac{2}{3}$
- $-25x^2 + 120x + 25 = 0$   
 $-5(x - 5)(5x + 1) = 0$   
 $x = 5, -\frac{1}{5}$
- $-8x^2 - 108x - 324 = 0$   
 $-4(2x + 9)(x + 9) = 0$   
 $x = -4\frac{1}{2}, -9$
- $-12x^2 - 15x - 3 = 0$   
 $-3(4x + 1)(x + 1) = 0$   
 $x = -\frac{1}{4}, -1$
- $25x^2 + 85x + 70 = 0$   
 $5(5x + 7)(x + 2) = 0$   
 $x = -1\frac{2}{5}, -2$
- $16x^2 + 164x + 180 = 0$   
 $4(4x + 5)(x + 9) = 0$   
 $x = -1\frac{1}{4}, -9$
- $-10x^2 + 2x + 36 = 0$   
 $-2(5x + 9)(x - 2) = 0$   
 $x = -1\frac{4}{5}, 2$
- $-20x^2 + 156x - 216 = 0$   
 $-4(5x - 9)(x - 6) = 0$   
 $x = 1\frac{4}{5}, 6$