

# Solving Quadratic Equations (D)

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

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

Solve each equation for x.

1.  $45x^2 + 387x + 504 = 0$

11.  $-9x^2 + 42x + 147 = 0$

2.  $40x^2 + 32x - 72 = 0$

12.  $36x^2 + 6x - 6 = 0$

3.  $24x^2 + 16x - 128 = 0$

13.  $-15x^2 - 80x - 25 = 0$

4.  $25x^2 + 145x - 210 = 0$

14.  $-12x^2 + 74x - 90 = 0$

5.  $-5x^2 + 405 = 0$

15.  $12x^2 + 102x + 126 = 0$

6.  $18x^2 + 123x - 21 = 0$

16.  $12x^2 - 66x + 90 = 0$

7.  $-4x^2 - 38x - 18 = 0$

17.  $8x^2 + 58x + 90 = 0$

8.  $36x^2 + 40x + 4 = 0$

18.  $14x^2 + 76x + 30 = 0$

9.  $-42x^2 - 432x - 486 = 0$

19.  $16x^2 + 50x + 36 = 0$

10.  $-64x^2 + 16x + 168 = 0$

20.  $-48x^2 + 200x - 32 = 0$

# Solving Quadratic Equations (D) Answers

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

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

Solve each equation for x.

- $45x^2 + 387x + 504 = 0$   
 $9(x + 7)(5x + 8) = 0$   
 $x = -7, -1\frac{3}{5}$
- $40x^2 + 32x - 72 = 0$   
 $8(x - 1)(5x + 9) = 0$   
 $x = 1, -1\frac{4}{5}$
- $24x^2 + 16x - 128 = 0$   
 $8(3x + 8)(x - 2) = 0$   
 $x = -2\frac{2}{3}, 2$
- $25x^2 + 145x - 210 = 0$   
 $5(5x - 6)(x + 7) = 0$   
 $x = 1\frac{1}{5}, -7$
- $-5x^2 + 405 = 0$   
 $-5(x + 9)(x - 9) = 0$   
 $x = -9, 9$
- $18x^2 + 123x - 21 = 0$   
 $3(6x - 1)(x + 7) = 0$   
 $x = \frac{1}{6}, -7$
- $-4x^2 - 38x - 18 = 0$   
 $-2(x + 9)(2x + 1) = 0$   
 $x = -9, -\frac{1}{2}$
- $36x^2 + 40x + 4 = 0$   
 $4(9x + 1)(x + 1) = 0$   
 $x = -\frac{1}{9}, -1$
- $-42x^2 - 432x - 486 = 0$   
 $-6(7x + 9)(x + 9) = 0$   
 $x = -1\frac{2}{7}, -9$
- $-64x^2 + 16x + 168 = 0$   
 $-8(4x - 7)(2x + 3) = 0$   
 $x = 1\frac{3}{4}, -1\frac{1}{2}$
- $-9x^2 + 42x + 147 = 0$   
 $-3(3x + 7)(x - 7) = 0$   
 $x = -2\frac{1}{3}, 7$
- $36x^2 + 6x - 6 = 0$   
 $6(3x - 1)(2x + 1) = 0$   
 $x = \frac{1}{3}, -\frac{1}{2}$
- $-15x^2 - 80x - 25 = 0$   
 $-5(x + 5)(3x + 1) = 0$   
 $x = -5, -\frac{1}{3}$
- $-12x^2 + 74x - 90 = 0$   
 $-2(3x - 5)(2x - 9) = 0$   
 $x = 1\frac{2}{3}, 4\frac{1}{2}$
- $12x^2 + 102x + 126 = 0$   
 $6(x + 7)(2x + 3) = 0$   
 $x = -7, -1\frac{1}{2}$
- $12x^2 - 66x + 90 = 0$   
 $6(2x - 5)(x - 3) = 0$   
 $x = 2\frac{1}{2}, 3$
- $8x^2 + 58x + 90 = 0$   
 $2(4x + 9)(x + 5) = 0$   
 $x = -2\frac{1}{4}, -5$
- $14x^2 + 76x + 30 = 0$   
 $2(7x + 3)(x + 5) = 0$   
 $x = -\frac{3}{7}, -5$
- $16x^2 + 50x + 36 = 0$   
 $2(x + 2)(8x + 9) = 0$   
 $x = -2, -1\frac{1}{8}$
- $-48x^2 + 200x - 32 = 0$   
 $-8(x - 4)(6x - 1) = 0$   
 $x = 4, \frac{1}{6}$