

# Solving Quadratic Equations (B)

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

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

Solve each equation for x.

1.  $-8x^2 + 8x - 2 = 0$

11.  $12x^2 + 12x - 45 = 0$

2.  $6x^2 - 45x + 84 = 0$

12.  $-20x^2 - 115x - 75 = 0$

3.  $25x^2 + 90x + 45 = 0$

13.  $20x^2 + 25x - 30 = 0$

4.  $2x^2 - 8x - 64 = 0$

14.  $16x^2 - 44x + 28 = 0$

5.  $15x^2 - 78x + 72 = 0$

15.  $8x^2 - 4x - 40 = 0$

6.  $16x^2 - 44x - 80 = 0$

16.  $-12x^2 + 63x + 147 = 0$

7.  $-8x^2 + 46x + 144 = 0$

17.  $10x^2 - 5x - 105 = 0$

8.  $15x^2 - 126x - 81 = 0$

18.  $-10x^2 + 78x - 108 = 0$

9.  $-9x^2 + 69x + 24 = 0$

19.  $8x^2 + 8x - 126 = 0$

10.  $2x^2 - 2x - 40 = 0$

20.  $-3x^2 - 33x - 84 = 0$

# Solving Quadratic Equations (B) Answers

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

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

Solve each equation for x.

- $-8x^2 + 8x - 2 = 0$   
 $-2(2x - 1)(2x - 1) = -2(2x - 1)^2 = 0$   
 $x = \frac{1}{2}$
- $6x^2 - 45x + 84 = 0$   
 $3(2x - 7)(x - 4) = 0$   
 $x = 3\frac{1}{2}, 4$
- $25x^2 + 90x + 45 = 0$   
 $5(5x + 3)(x + 3) = 0$   
 $x = -\frac{3}{5}, -3$
- $2x^2 - 8x - 64 = 0$   
 $2(x + 4)(x - 8) = 0$   
 $x = -4, 8$
- $15x^2 - 78x + 72 = 0$   
 $3(x - 4)(5x - 6) = 0$   
 $x = 4, 1\frac{1}{5}$
- $16x^2 - 44x - 80 = 0$   
 $4(4x + 5)(x - 4) = 0$   
 $x = -1\frac{1}{4}, 4$
- $-8x^2 + 46x + 144 = 0$   
 $-2(4x + 9)(x - 8) = 0$   
 $x = -2\frac{1}{4}, 8$
- $15x^2 - 126x - 81 = 0$   
 $3(5x + 3)(x - 9) = 0$   
 $x = -\frac{3}{5}, 9$
- $-9x^2 + 69x + 24 = 0$   
 $-3(x - 8)(3x + 1) = 0$   
 $x = 8, -\frac{1}{3}$
- $2x^2 - 2x - 40 = 0$   
 $2(x + 4)(x - 5) = 0$   
 $x = -4, 5$
- $12x^2 + 12x - 45 = 0$   
 $3(2x + 5)(2x - 3) = 0$   
 $x = -2\frac{1}{2}, 1\frac{1}{2}$
- $-20x^2 - 115x - 75 = 0$   
 $-5(4x + 3)(x + 5) = 0$   
 $x = -\frac{3}{4}, -5$
- $20x^2 + 25x - 30 = 0$   
 $5(4x - 3)(x + 2) = 0$   
 $x = \frac{3}{4}, -2$
- $16x^2 - 44x + 28 = 0$   
 $4(4x - 7)(x - 1) = 0$   
 $x = 1\frac{3}{4}, 1$
- $8x^2 - 4x - 40 = 0$   
 $4(x + 2)(2x - 5) = 0$   
 $x = -2, 2\frac{1}{2}$
- $-12x^2 + 63x + 147 = 0$   
 $-3(4x + 7)(x - 7) = 0$   
 $x = -1\frac{3}{4}, 7$
- $10x^2 - 5x - 105 = 0$   
 $5(2x - 7)(x + 3) = 0$   
 $x = 3\frac{1}{2}, -3$
- $-10x^2 + 78x - 108 = 0$   
 $-2(5x - 9)(x - 6) = 0$   
 $x = 1\frac{4}{5}, 6$
- $8x^2 + 8x - 126 = 0$   
 $2(2x + 9)(2x - 7) = 0$   
 $x = -4\frac{1}{2}, 3\frac{1}{2}$
- $-3x^2 - 33x - 84 = 0$   
 $-3(x + 4)(x + 7) = 0$   
 $x = -4, -7$