

# Solving Quadratic Equations (H)

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

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

Solve each equation for x.

1.  $x^2 - 10x + 9 = 0$

11.  $4x^2 + 8x - 45 = 0$

2.  $5x^2 - 27x - 18 = 0$

12.  $4x^2 + 35x + 24 = 0$

3.  $x^2 + 4x - 21 = 0$

13.  $3x^2 + 23x - 36 = 0$

4.  $4x^2 + 5x - 6 = 0$

14.  $4x^2 + 19x - 30 = 0$

5.  $x^2 + 13x + 40 = 0$

15.  $3x^2 - 34x + 63 = 0$

6.  $4x^2 - 35x + 49 = 0$

16.  $5x^2 - 32x + 35 = 0$

7.  $5x^2 + 31x - 72 = 0$

17.  $5x^2 - 31x + 30 = 0$

8.  $3x^2 + 32x + 64 = 0$

18.  $4x^2 - 27x + 18 = 0$

9.  $4x^2 + 32x + 63 = 0$

19.  $2x^2 + 11x + 5 = 0$

10.  $2x^2 - 7x + 5 = 0$

20.  $x^2 - 9x + 14 = 0$

# Solving Quadratic Equations (H) Answers

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

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

Solve each equation for x.

1.  $x^2 - 10x + 9 = 0$   
 $(x - 9)(x - 1) = 0$   
 $x = 9, 1$

2.  $5x^2 - 27x - 18 = 0$   
 $(5x + 3)(x - 6) = 0$   
 $x = -\frac{3}{5}, 6$

3.  $x^2 + 4x - 21 = 0$   
 $(x + 7)(x - 3) = 0$   
 $x = -7, 3$

4.  $4x^2 + 5x - 6 = 0$   
 $(x + 2)(4x - 3) = 0$   
 $x = -2, \frac{3}{4}$

5.  $x^2 + 13x + 40 = 0$   
 $(x + 8)(x + 5) = 0$   
 $x = -8, -5$

6.  $4x^2 - 35x + 49 = 0$   
 $(4x - 7)(x - 7) = 0$   
 $x = 1\frac{3}{4}, 7$

7.  $5x^2 + 31x - 72 = 0$   
 $(x + 8)(5x - 9) = 0$   
 $x = -8, 1\frac{4}{5}$

8.  $3x^2 + 32x + 64 = 0$   
 $(3x + 8)(x + 8) = 0$   
 $x = -2\frac{2}{3}, -8$

9.  $4x^2 + 32x + 63 = 0$   
 $(2x + 7)(2x + 9) = 0$   
 $x = -3\frac{1}{2}, -4\frac{1}{2}$

10.  $2x^2 - 7x + 5 = 0$   
 $(x - 1)(2x - 5) = 0$   
 $x = 1, 2\frac{1}{2}$

11.  $4x^2 + 8x - 45 = 0$   
 $(2x + 9)(2x - 5) = 0$   
 $x = -4\frac{1}{2}, 2\frac{1}{2}$

12.  $4x^2 + 35x + 24 = 0$   
 $(4x + 3)(x + 8) = 0$   
 $x = -\frac{3}{4}, -8$

13.  $3x^2 + 23x - 36 = 0$   
 $(3x - 4)(x + 9) = 0$   
 $x = 1\frac{1}{3}, -9$

14.  $4x^2 + 19x - 30 = 0$   
 $(x + 6)(4x - 5) = 0$   
 $x = -6, 1\frac{1}{4}$

15.  $3x^2 - 34x + 63 = 0$   
 $(x - 9)(3x - 7) = 0$   
 $x = 9, 2\frac{1}{3}$

16.  $5x^2 - 32x + 35 = 0$   
 $(x - 5)(5x - 7) = 0$   
 $x = 5, 1\frac{2}{5}$

17.  $5x^2 - 31x + 30 = 0$   
 $(x - 5)(5x - 6) = 0$   
 $x = 5, 1\frac{1}{5}$

18.  $4x^2 - 27x + 18 = 0$   
 $(4x - 3)(x - 6) = 0$   
 $x = \frac{3}{4}, 6$

19.  $2x^2 + 11x + 5 = 0$   
 $(2x + 1)(x + 5) = 0$   
 $x = -\frac{1}{2}, -5$

20.  $x^2 - 9x + 14 = 0$   
 $(x - 2)(x - 7) = 0$   
 $x = 2, 7$