

# Solving Quadratic Equations (A)

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

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

Solve each equation for x.

1.  $x^2 + 5x + 6 = 0$

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

2.  $x^2 - 36 = 0$

12.  $x^2 - 7x + 6 = 0$

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

13.  $x^2 - 2x - 35 = 0$

4.  $x^2 - 3x - 28 = 0$

14.  $x^2 + 5x - 14 = 0$

5.  $x^2 + 11x + 18 = 0$

15.  $x^2 - x - 30 = 0$

6.  $x^2 + 14x + 48 = 0$

16.  $x^2 - 14x + 45 = 0$

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

17.  $x^2 + 9x + 18 = 0$

8.  $x^2 - 11x + 28 = 0$

18.  $x^2 - 14x + 48 = 0$

9.  $x^2 - 6x - 27 = 0$

19.  $x^2 + 12x + 27 = 0$

10.  $x^2 - 3x - 40 = 0$

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

# Solving Quadratic Equations (A) Answers

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

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

Solve each equation for x.

1.  $x^2 + 5x + 6 = 0$   
 $(x + 2)(x + 3) = 0$   
 $x = -2, -3$

2.  $x^2 - 36 = 0$   
 $(x - 6)(x + 6) = 0$   
 $x = 6, -6$

3.  $x^2 - 2x - 15 = 0$   
 $(x + 3)(x - 5) = 0$   
 $x = -3, 5$

4.  $x^2 - 3x - 28 = 0$   
 $(x + 4)(x - 7) = 0$   
 $x = -4, 7$

5.  $x^2 + 11x + 18 = 0$   
 $(x + 2)(x + 9) = 0$   
 $x = -2, -9$

6.  $x^2 + 14x + 48 = 0$   
 $(x + 6)(x + 8) = 0$   
 $x = -6, -8$

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

8.  $x^2 - 11x + 28 = 0$   
 $(x - 4)(x - 7) = 0$   
 $x = 4, 7$

9.  $x^2 - 6x - 27 = 0$   
 $(x - 9)(x + 3) = 0$   
 $x = 9, -3$

10.  $x^2 - 3x - 40 = 0$   
 $(x - 8)(x + 5) = 0$   
 $x = 8, -5$

11.  $x^2 - 2x + 1 = 0$   
 $(x - 1)(x - 1) = (x - 1)^2 = 0$   
 $x = 1$

12.  $x^2 - 7x + 6 = 0$   
 $(x - 6)(x - 1) = 0$   
 $x = 6, 1$

13.  $x^2 - 2x - 35 = 0$   
 $(x - 7)(x + 5) = 0$   
 $x = 7, -5$

14.  $x^2 + 5x - 14 = 0$   
 $(x + 7)(x - 2) = 0$   
 $x = -7, 2$

15.  $x^2 - x - 30 = 0$   
 $(x - 6)(x + 5) = 0$   
 $x = 6, -5$

16.  $x^2 - 14x + 45 = 0$   
 $(x - 5)(x - 9) = 0$   
 $x = 5, 9$

17.  $x^2 + 9x + 18 = 0$   
 $(x + 3)(x + 6) = 0$   
 $x = -3, -6$

18.  $x^2 - 14x + 48 = 0$   
 $(x - 8)(x - 6) = 0$   
 $x = 8, 6$

19.  $x^2 + 12x + 27 = 0$   
 $(x + 9)(x + 3) = 0$   
 $x = -9, -3$

20.  $x^2 + 2x - 3 = 0$   
 $(x - 1)(x + 3) = 0$   
 $x = 1, -3$

# Solving Quadratic Equations (B)

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

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

Solve each equation for x.

1.  $x^2 - 14x + 45 = 0$

11.  $x^2 + 16x + 63 = 0$

2.  $x^2 - 8x - 9 = 0$

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

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

13.  $x^2 + 3x - 40 = 0$

4.  $x^2 - 11x + 28 = 0$

14.  $x^2 + 12x + 35 = 0$

5.  $x^2 - 3x - 54 = 0$

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

6.  $x^2 - 7x + 6 = 0$

16.  $x^2 + 10x + 24 = 0$

7.  $x^2 - 11x + 24 = 0$

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

8.  $x^2 - 18x + 81 = 0$

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

9.  $x^2 + x - 56 = 0$

19.  $x^2 - 4x - 5 = 0$

10.  $x^2 + 2x - 24 = 0$

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

# Solving Quadratic Equations (B) Answers

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

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

Solve each equation for x.

1.  $x^2 - 14x + 45 = 0$   
 $(x - 9)(x - 5) = 0$   
 $x = 9, 5$

2.  $x^2 - 8x - 9 = 0$   
 $(x - 9)(x + 1) = 0$   
 $x = 9, -1$

3.  $x^2 - 3x - 10 = 0$   
 $(x + 2)(x - 5) = 0$   
 $x = -2, 5$

4.  $x^2 - 11x + 28 = 0$   
 $(x - 7)(x - 4) = 0$   
 $x = 7, 4$

5.  $x^2 - 3x - 54 = 0$   
 $(x - 9)(x + 6) = 0$   
 $x = 9, -6$

6.  $x^2 - 7x + 6 = 0$   
 $(x - 1)(x - 6) = 0$   
 $x = 1, 6$

7.  $x^2 - 11x + 24 = 0$   
 $(x - 8)(x - 3) = 0$   
 $x = 8, 3$

8.  $x^2 - 18x + 81 = 0$   
 $(x - 9)(x - 9) = (x - 9)^2 = 0$   
 $x = 9$

9.  $x^2 + x - 56 = 0$   
 $(x + 8)(x - 7) = 0$   
 $x = -8, 7$

10.  $x^2 + 2x - 24 = 0$   
 $(x + 6)(x - 4) = 0$   
 $x = -6, 4$

11.  $x^2 + 16x + 63 = 0$   
 $(x + 7)(x + 9) = 0$   
 $x = -7, -9$

12.  $x^2 + 2x - 8 = 0$   
 $(x + 4)(x - 2) = 0$   
 $x = -4, 2$

13.  $x^2 + 3x - 40 = 0$   
 $(x + 8)(x - 5) = 0$   
 $x = -8, 5$

14.  $x^2 + 12x + 35 = 0$   
 $(x + 7)(x + 5) = 0$   
 $x = -7, -5$

15.  $x^2 - 5x + 4 = 0$   
 $(x - 1)(x - 4) = 0$   
 $x = 1, 4$

16.  $x^2 + 10x + 24 = 0$   
 $(x + 6)(x + 4) = 0$   
 $x = -6, -4$

17.  $x^2 + 5x - 6 = 0$   
 $(x + 6)(x - 1) = 0$   
 $x = -6, 1$

18.  $x^2 + 4x + 4 = 0$   
 $(x + 2)(x + 2) = (x + 2)^2 = 0$   
 $x = -2$

19.  $x^2 - 4x - 5 = 0$   
 $(x - 5)(x + 1) = 0$   
 $x = 5, -1$

20.  $x^2 + 3x - 4 = 0$   
 $(x + 4)(x - 1) = 0$   
 $x = -4, 1$

# Solving Quadratic Equations (C)

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

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

Solve each equation for x.

1.  $x^2 + 11x + 28 = 0$

11.  $x^2 + 4x + 3 = 0$

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

12.  $x^2 - 1 = 0$

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

13.  $x^2 + 10x + 21 = 0$

4.  $x^2 - 3x - 54 = 0$

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

5.  $x^2 - 8x + 12 = 0$

15.  $x^2 - 6x + 8 = 0$

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

16.  $x^2 - 4x - 12 = 0$

7.  $x^2 - 6x - 7 = 0$

17.  $x^2 + 6x + 9 = 0$

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

18.  $x^2 + 8x + 12 = 0$

9.  $x^2 - 36 = 0$

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

10.  $x^2 + x - 30 = 0$

20.  $x^2 - x - 42 = 0$

# Solving Quadratic Equations (C) Answers

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

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

Solve each equation for x.

1.  $x^2 + 11x + 28 = 0$   
 $(x + 7)(x + 4) = 0$   
 $x = -7, -4$

2.  $x^2 + x - 72 = 0$   
 $(x - 8)(x + 9) = 0$   
 $x = 8, -9$

3.  $x^2 + x - 6 = 0$   
 $(x + 3)(x - 2) = 0$   
 $x = -3, 2$

4.  $x^2 - 3x - 54 = 0$   
 $(x - 9)(x + 6) = 0$   
 $x = 9, -6$

5.  $x^2 - 8x + 12 = 0$   
 $(x - 2)(x - 6) = 0$   
 $x = 2, 6$

6.  $x^2 + 4x + 4 = 0$   
 $(x + 2)(x + 2) = (x + 2)^2 = 0$   
 $x = -2$

7.  $x^2 - 6x - 7 = 0$   
 $(x - 7)(x + 1) = 0$   
 $x = 7, -1$

8.  $x^2 + 2x - 3 = 0$   
 $(x + 3)(x - 1) = 0$   
 $x = -3, 1$

9.  $x^2 - 36 = 0$   
 $(x + 6)(x - 6) = 0$   
 $x = -6, 6$

10.  $x^2 + x - 30 = 0$   
 $(x + 6)(x - 5) = 0$   
 $x = -6, 5$

11.  $x^2 + 4x + 3 = 0$   
 $(x + 1)(x + 3) = 0$   
 $x = -1, -3$

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

13.  $x^2 + 10x + 21 = 0$   
 $(x + 3)(x + 7) = 0$   
 $x = -3, -7$

14.  $x^2 + x - 12 = 0$   
 $(x + 4)(x - 3) = 0$   
 $x = -4, 3$

15.  $x^2 - 6x + 8 = 0$   
 $(x - 2)(x - 4) = 0$   
 $x = 2, 4$

16.  $x^2 - 4x - 12 = 0$   
 $(x + 2)(x - 6) = 0$   
 $x = -2, 6$

17.  $x^2 + 6x + 9 = 0$   
 $(x + 3)(x + 3) = (x + 3)^2 = 0$   
 $x = -3$

18.  $x^2 + 8x + 12 = 0$   
 $(x + 2)(x + 6) = 0$   
 $x = -2, -6$

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

20.  $x^2 - x - 42 = 0$   
 $(x + 6)(x - 7) = 0$   
 $x = -6, 7$

# Solving Quadratic Equations (D)

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

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

Solve each equation for x.

1.  $x^2 + 11x + 18 = 0$

11.  $x^2 + 4x + 3 = 0$

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

12.  $x^2 - 2x - 24 = 0$

3.  $x^2 + 15x + 56 = 0$

13.  $x^2 + 7x - 8 = 0$

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

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

5.  $x^2 + 13x + 36 = 0$

15.  $x^2 + 10x + 9 = 0$

6.  $x^2 - 6x - 27 = 0$

16.  $x^2 - 36 = 0$

7.  $x^2 - 11x + 24 = 0$

17.  $x^2 + 4x - 45 = 0$

8.  $x^2 - 6x + 8 = 0$

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

9.  $x^2 + 11x + 30 = 0$

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

10.  $x^2 + 8x - 9 = 0$

20.  $x^2 + 2x - 15 = 0$

# Solving Quadratic Equations (D) Answers

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

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

Solve each equation for x.

1.  $x^2 + 11x + 18 = 0$   
 $(x + 2)(x + 9) = 0$   
 $x = -2, -9$

2.  $x^2 + x - 72 = 0$   
 $(x - 8)(x + 9) = 0$   
 $x = 8, -9$

3.  $x^2 + 15x + 56 = 0$   
 $(x + 7)(x + 8) = 0$   
 $x = -7, -8$

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

5.  $x^2 + 13x + 36 = 0$   
 $(x + 4)(x + 9) = 0$   
 $x = -4, -9$

6.  $x^2 - 6x - 27 = 0$   
 $(x - 9)(x + 3) = 0$   
 $x = 9, -3$

7.  $x^2 - 11x + 24 = 0$   
 $(x - 8)(x - 3) = 0$   
 $x = 8, 3$

8.  $x^2 - 6x + 8 = 0$   
 $(x - 2)(x - 4) = 0$   
 $x = 2, 4$

9.  $x^2 + 11x + 30 = 0$   
 $(x + 5)(x + 6) = 0$   
 $x = -5, -6$

10.  $x^2 + 8x - 9 = 0$   
 $(x - 1)(x + 9) = 0$   
 $x = 1, -9$

11.  $x^2 + 4x + 3 = 0$   
 $(x + 3)(x + 1) = 0$   
 $x = -3, -1$

12.  $x^2 - 2x - 24 = 0$   
 $(x + 4)(x - 6) = 0$   
 $x = -4, 6$

13.  $x^2 + 7x - 8 = 0$   
 $(x - 1)(x + 8) = 0$   
 $x = 1, -8$

14.  $x^2 + x - 30 = 0$   
 $(x - 5)(x + 6) = 0$   
 $x = 5, -6$

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

16.  $x^2 - 36 = 0$   
 $(x + 6)(x - 6) = 0$   
 $x = -6, 6$

17.  $x^2 + 4x - 45 = 0$   
 $(x - 5)(x + 9) = 0$   
 $x = 5, -9$

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

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

20.  $x^2 + 2x - 15 = 0$   
 $(x - 3)(x + 5) = 0$   
 $x = 3, -5$



# Solving Quadratic Equations (E)

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

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

Solve each equation for x.

1.  $x^2 - 2x - 3 = 0$

11.  $x^2 - 11x + 30 = 0$

2.  $x^2 + 6x - 7 = 0$

12.  $x^2 - 13x + 42 = 0$

3.  $x^2 - 4x - 5 = 0$

13.  $x^2 - 11x + 28 = 0$

4.  $x^2 - 6x - 7 = 0$

14.  $x^2 - 6x + 9 = 0$

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

15.  $x^2 - 13x + 40 = 0$

6.  $x^2 - 49 = 0$

16.  $x^2 + 5x + 4 = 0$

7.  $x^2 - 9 = 0$

17.  $x^2 + 8x + 7 = 0$

8.  $x^2 + 6x - 27 = 0$

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

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

19.  $x^2 - x - 42 = 0$

10.  $x^2 + 13x + 36 = 0$

20.  $x^2 + 11x + 24 = 0$

# Solving Quadratic Equations (E) Answers

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

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

Solve each equation for x.

1.  $x^2 - 2x - 3 = 0$   
 $(x + 1)(x - 3) = 0$   
 $x = -1, 3$

2.  $x^2 + 6x - 7 = 0$   
 $(x - 1)(x + 7) = 0$   
 $x = 1, -7$

3.  $x^2 - 4x - 5 = 0$   
 $(x - 5)(x + 1) = 0$   
 $x = 5, -1$

4.  $x^2 - 6x - 7 = 0$   
 $(x + 1)(x - 7) = 0$   
 $x = -1, 7$

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

6.  $x^2 - 49 = 0$   
 $(x + 7)(x - 7) = 0$   
 $x = -7, 7$

7.  $x^2 - 9 = 0$   
 $(x - 3)(x + 3) = 0$   
 $x = 3, -3$

8.  $x^2 + 6x - 27 = 0$   
 $(x - 3)(x + 9) = 0$   
 $x = 3, -9$

9.  $x^2 - 6x - 16 = 0$   
 $(x + 2)(x - 8) = 0$   
 $x = -2, 8$

10.  $x^2 + 13x + 36 = 0$   
 $(x + 9)(x + 4) = 0$   
 $x = -9, -4$

11.  $x^2 - 11x + 30 = 0$   
 $(x - 6)(x - 5) = 0$   
 $x = 6, 5$

12.  $x^2 - 13x + 42 = 0$   
 $(x - 6)(x - 7) = 0$   
 $x = 6, 7$

13.  $x^2 - 11x + 28 = 0$   
 $(x - 7)(x - 4) = 0$   
 $x = 7, 4$

14.  $x^2 - 6x + 9 = 0$   
 $(x - 3)(x - 3) = (x - 3)^2 = 0$   
 $x = 3$

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

16.  $x^2 + 5x + 4 = 0$   
 $(x + 1)(x + 4) = 0$   
 $x = -1, -4$

17.  $x^2 + 8x + 7 = 0$   
 $(x + 1)(x + 7) = 0$   
 $x = -1, -7$

18.  $x^2 - 5x + 4 = 0$   
 $(x - 1)(x - 4) = 0$   
 $x = 1, 4$

19.  $x^2 - x - 42 = 0$   
 $(x - 7)(x + 6) = 0$   
 $x = 7, -6$

20.  $x^2 + 11x + 24 = 0$   
 $(x + 8)(x + 3) = 0$   
 $x = -8, -3$

# Solving Quadratic Equations (F)

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

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

Solve each equation for x.

1.  $x^2 + 10x + 25 = 0$

11.  $x^2 + 5x - 36 = 0$

2.  $x^2 - 2x - 63 = 0$

12.  $x^2 - 13x + 42 = 0$

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

13.  $x^2 - 11x + 30 = 0$

4.  $x^2 + 14x + 48 = 0$

14.  $x^2 - x - 56 = 0$

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

15.  $x^2 - 3x - 28 = 0$

6.  $x^2 - 4x - 21 = 0$

16.  $x^2 - 4x + 4 = 0$

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

17.  $x^2 - 5x - 6 = 0$

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

18.  $x^2 - 11x + 18 = 0$

9.  $x^2 + 11x + 24 = 0$

19.  $x^2 + 5x - 14 = 0$

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

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

# Solving Quadratic Equations (F) Answers

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

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

Solve each equation for x.

1.  $x^2 + 10x + 25 = 0$   
 $(x + 5)(x + 5) = (x + 5)^2 = 0$   
 $x = -5$

2.  $x^2 - 2x - 63 = 0$   
 $(x - 9)(x + 7) = 0$   
 $x = 9, -7$

3.  $x^2 - 13x + 36 = 0$   
 $(x - 9)(x - 4) = 0$   
 $x = 9, 4$

4.  $x^2 + 14x + 48 = 0$   
 $(x + 6)(x + 8) = 0$   
 $x = -6, -8$

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

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

7.  $x^2 - 9x + 20 = 0$   
 $(x - 5)(x - 4) = 0$   
 $x = 5, 4$

8.  $x^2 - 3x + 2 = 0$   
 $(x - 1)(x - 2) = 0$   
 $x = 1, 2$

9.  $x^2 + 11x + 24 = 0$   
 $(x + 3)(x + 8) = 0$   
 $x = -3, -8$

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

11.  $x^2 + 5x - 36 = 0$   
 $(x + 9)(x - 4) = 0$   
 $x = -9, 4$

12.  $x^2 - 13x + 42 = 0$   
 $(x - 6)(x - 7) = 0$   
 $x = 6, 7$

13.  $x^2 - 11x + 30 = 0$   
 $(x - 6)(x - 5) = 0$   
 $x = 6, 5$

14.  $x^2 - x - 56 = 0$   
 $(x - 8)(x + 7) = 0$   
 $x = 8, -7$

15.  $x^2 - 3x - 28 = 0$   
 $(x + 4)(x - 7) = 0$   
 $x = -4, 7$

16.  $x^2 - 4x + 4 = 0$   
 $(x - 2)(x - 2) = (x - 2)^2 = 0$   
 $x = 2$

17.  $x^2 - 5x - 6 = 0$   
 $(x + 1)(x - 6) = 0$   
 $x = -1, 6$

18.  $x^2 - 11x + 18 = 0$   
 $(x - 9)(x - 2) = 0$   
 $x = 9, 2$

19.  $x^2 + 5x - 14 = 0$   
 $(x + 7)(x - 2) = 0$   
 $x = -7, 2$

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

# Solving Quadratic Equations (G)

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

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

Solve each equation for x.

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

11.  $x^2 - 14x + 48 = 0$

2.  $x^2 + 10x + 16 = 0$

12.  $x^2 + 5x + 6 = 0$

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

13.  $x^2 + 14x + 45 = 0$

4.  $x^2 - 14x + 45 = 0$

14.  $x^2 + 14x + 49 = 0$

5.  $x^2 + 9x + 8 = 0$

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

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

16.  $x^2 - 3x - 18 = 0$

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

17.  $x^2 - 8x + 7 = 0$

8.  $x^2 - 7x + 12 = 0$

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

9.  $x^2 - 3x - 28 = 0$

19.  $x^2 + 6x + 5 = 0$

10.  $x^2 - 12x + 27 = 0$

20.  $x^2 + 3x - 40 = 0$

# Solving Quadratic Equations (G) Answers

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

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

Solve each equation for x.

1.  $x^2 + 3x - 10 = 0$   
 $(x + 5)(x - 2) = 0$   
 $x = -5, 2$

2.  $x^2 + 10x + 16 = 0$   
 $(x + 2)(x + 8) = 0$   
 $x = -2, -8$

3.  $x^2 - 2x - 48 = 0$   
 $(x - 8)(x + 6) = 0$   
 $x = 8, -6$

4.  $x^2 - 14x + 45 = 0$   
 $(x - 9)(x - 5) = 0$   
 $x = 9, 5$

5.  $x^2 + 9x + 8 = 0$   
 $(x + 1)(x + 8) = 0$   
 $x = -1, -8$

6.  $x^2 - 5x + 4 = 0$   
 $(x - 1)(x - 4) = 0$   
 $x = 1, 4$

7.  $x^2 - 6x + 5 = 0$   
 $(x - 5)(x - 1) = 0$   
 $x = 5, 1$

8.  $x^2 - 7x + 12 = 0$   
 $(x - 4)(x - 3) = 0$   
 $x = 4, 3$

9.  $x^2 - 3x - 28 = 0$   
 $(x - 7)(x + 4) = 0$   
 $x = 7, -4$

10.  $x^2 - 12x + 27 = 0$   
 $(x - 9)(x - 3) = 0$   
 $x = 9, 3$

11.  $x^2 - 14x + 48 = 0$   
 $(x - 6)(x - 8) = 0$   
 $x = 6, 8$

12.  $x^2 + 5x + 6 = 0$   
 $(x + 3)(x + 2) = 0$   
 $x = -3, -2$

13.  $x^2 + 14x + 45 = 0$   
 $(x + 9)(x + 5) = 0$   
 $x = -9, -5$

14.  $x^2 + 14x + 49 = 0$   
 $(x + 7)(x + 7) = (x + 7)^2 = 0$   
 $x = -7$

15.  $x^2 + x - 72 = 0$   
 $(x - 8)(x + 9) = 0$   
 $x = 8, -9$

16.  $x^2 - 3x - 18 = 0$   
 $(x - 6)(x + 3) = 0$   
 $x = 6, -3$

17.  $x^2 - 8x + 7 = 0$   
 $(x - 7)(x - 1) = 0$   
 $x = 7, 1$

18.  $x^2 - 3x + 2 = 0$   
 $(x - 2)(x - 1) = 0$   
 $x = 2, 1$

19.  $x^2 + 6x + 5 = 0$   
 $(x + 5)(x + 1) = 0$   
 $x = -5, -1$

20.  $x^2 + 3x - 40 = 0$   
 $(x + 8)(x - 5) = 0$   
 $x = -8, 5$

# Solving Quadratic Equations (H)

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

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

Solve each equation for x.

1.  $x^2 + 5x - 24 = 0$

11.  $x^2 - 11x + 28 = 0$

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

12.  $x^2 + 16x + 64 = 0$

3.  $x^2 + 3x - 28 = 0$

13.  $x^2 - 6x - 16 = 0$

4.  $x^2 - 13x + 40 = 0$

14.  $x^2 - 6x + 8 = 0$

5.  $x^2 - 7x - 8 = 0$

15.  $x^2 - 36 = 0$

6.  $x^2 - 3x - 40 = 0$

16.  $x^2 - 9x + 8 = 0$

7.  $x^2 - 4x - 5 = 0$

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

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

18.  $x^2 + 7x + 10 = 0$

9.  $x^2 - x - 2 = 0$

19.  $x^2 + 4x + 3 = 0$

10.  $x^2 - 64 = 0$

20.  $x^2 - 13x + 42 = 0$

# Solving Quadratic Equations (H) Answers

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

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

Solve each equation for x.

1.  $x^2 + 5x - 24 = 0$   
 $(x - 3)(x + 8) = 0$   
 $x = 3, -8$

2.  $x^2 - 13x + 36 = 0$   
 $(x - 4)(x - 9) = 0$   
 $x = 4, 9$

3.  $x^2 + 3x - 28 = 0$   
 $(x + 7)(x - 4) = 0$   
 $x = -7, 4$

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

5.  $x^2 - 7x - 8 = 0$   
 $(x + 1)(x - 8) = 0$   
 $x = -1, 8$

6.  $x^2 - 3x - 40 = 0$   
 $(x + 5)(x - 8) = 0$   
 $x = -5, 8$

7.  $x^2 - 4x - 5 = 0$   
 $(x + 1)(x - 5) = 0$   
 $x = -1, 5$

8.  $x^2 - x - 20 = 0$   
 $(x + 4)(x - 5) = 0$   
 $x = -4, 5$

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

10.  $x^2 - 64 = 0$   
 $(x + 8)(x - 8) = 0$   
 $x = -8, 8$

11.  $x^2 - 11x + 28 = 0$   
 $(x - 4)(x - 7) = 0$   
 $x = 4, 7$

12.  $x^2 + 16x + 64 = 0$   
 $(x + 8)(x + 8) = (x + 8)^2 = 0$   
 $x = -8$

13.  $x^2 - 6x - 16 = 0$   
 $(x - 8)(x + 2) = 0$   
 $x = 8, -2$

14.  $x^2 - 6x + 8 = 0$   
 $(x - 2)(x - 4) = 0$   
 $x = 2, 4$

15.  $x^2 - 36 = 0$   
 $(x - 6)(x + 6) = 0$   
 $x = 6, -6$

16.  $x^2 - 9x + 8 = 0$   
 $(x - 1)(x - 8) = 0$   
 $x = 1, 8$

17.  $x^2 - 5x + 6 = 0$   
 $(x - 2)(x - 3) = 0$   
 $x = 2, 3$

18.  $x^2 + 7x + 10 = 0$   
 $(x + 5)(x + 2) = 0$   
 $x = -5, -2$

19.  $x^2 + 4x + 3 = 0$   
 $(x + 1)(x + 3) = 0$   
 $x = -1, -3$

20.  $x^2 - 13x + 42 = 0$   
 $(x - 7)(x - 6) = 0$   
 $x = 7, 6$



# Solving Quadratic Equations (I)

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

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

Solve each equation for x.

1.  $x^2 - 25 = 0$

11.  $x^2 - 8x + 15 = 0$

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

12.  $x^2 + 3x + 2 = 0$

3.  $x^2 - 13x + 40 = 0$

13.  $x^2 + 14x + 45 = 0$

4.  $x^2 + 11x + 30 = 0$

14.  $x^2 + 7x + 12 = 0$

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

15.  $x^2 + 4x + 3 = 0$

6.  $x^2 + 7x - 18 = 0$

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

7.  $x^2 + 15x + 56 = 0$

17.  $x^2 + 6x - 7 = 0$

8.  $x^2 - 7x + 6 = 0$

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

9.  $x^2 - 2x - 35 = 0$

19.  $x^2 + 12x + 32 = 0$

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

20.  $x^2 - 10x + 25 = 0$

# Solving Quadratic Equations (I) Answers

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

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

Solve each equation for x.

1.  $x^2 - 25 = 0$   
 $(x + 5)(x - 5) = 0$   
 $x = -5, 5$

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

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

4.  $x^2 + 11x + 30 = 0$   
 $(x + 6)(x + 5) = 0$   
 $x = -6, -5$

5.  $x^2 - 5x + 6 = 0$   
 $(x - 3)(x - 2) = 0$   
 $x = 3, 2$

6.  $x^2 + 7x - 18 = 0$   
 $(x + 9)(x - 2) = 0$   
 $x = -9, 2$

7.  $x^2 + 15x + 56 = 0$   
 $(x + 8)(x + 7) = 0$   
 $x = -8, -7$

8.  $x^2 - 7x + 6 = 0$   
 $(x - 6)(x - 1) = 0$   
 $x = 6, 1$

9.  $x^2 - 2x - 35 = 0$   
 $(x + 5)(x - 7) = 0$   
 $x = -5, 7$

10.  $x^2 + 2x - 8 = 0$   
 $(x + 4)(x - 2) = 0$   
 $x = -4, 2$

11.  $x^2 - 8x + 15 = 0$   
 $(x - 5)(x - 3) = 0$   
 $x = 5, 3$

12.  $x^2 + 3x + 2 = 0$   
 $(x + 2)(x + 1) = 0$   
 $x = -2, -1$

13.  $x^2 + 14x + 45 = 0$   
 $(x + 9)(x + 5) = 0$   
 $x = -9, -5$

14.  $x^2 + 7x + 12 = 0$   
 $(x + 4)(x + 3) = 0$   
 $x = -4, -3$

15.  $x^2 + 4x + 3 = 0$   
 $(x + 1)(x + 3) = 0$   
 $x = -1, -3$

16.  $x^2 - 9x + 20 = 0$   
 $(x - 4)(x - 5) = 0$   
 $x = 4, 5$

17.  $x^2 + 6x - 7 = 0$   
 $(x - 1)(x + 7) = 0$   
 $x = 1, -7$

18.  $x^2 - 6x + 5 = 0$   
 $(x - 5)(x - 1) = 0$   
 $x = 5, 1$

19.  $x^2 + 12x + 32 = 0$   
 $(x + 8)(x + 4) = 0$   
 $x = -8, -4$

20.  $x^2 - 10x + 25 = 0$   
 $(x - 5)(x - 5) = (x - 5)^2 = 0$   
 $x = 5$

# Solving Quadratic Equations (J)

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

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

Solve each equation for x.

1.  $x^2 + 3x - 18 = 0$

11.  $x^2 + 17x + 72 = 0$

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

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

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

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

4.  $x^2 + 6x - 27 = 0$

14.  $x^2 - 13x + 36 = 0$

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

15.  $x^2 + 7x + 6 = 0$

6.  $x^2 + 9x + 18 = 0$

16.  $x^2 + 5x + 6 = 0$

7.  $x^2 - x - 72 = 0$

17.  $x^2 + 4x - 45 = 0$

8.  $x^2 - 81 = 0$

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

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

19.  $x^2 - 10x + 16 = 0$

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

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

# Solving Quadratic Equations (J) Answers

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

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

Solve each equation for x.

1.  $x^2 + 3x - 18 = 0$   
 $(x + 6)(x - 3) = 0$   
 $x = -6, 3$

2.  $x^2 + 4x - 5 = 0$   
 $(x + 5)(x - 1) = 0$   
 $x = -5, 1$

3.  $x^2 - 2x - 3 = 0$   
 $(x + 1)(x - 3) = 0$   
 $x = -1, 3$

4.  $x^2 + 6x - 27 = 0$   
 $(x - 3)(x + 9) = 0$   
 $x = 3, -9$

5.  $x^2 + 3x - 4 = 0$   
 $(x - 1)(x + 4) = 0$   
 $x = 1, -4$

6.  $x^2 + 9x + 18 = 0$   
 $(x + 6)(x + 3) = 0$   
 $x = -6, -3$

7.  $x^2 - x - 72 = 0$   
 $(x + 8)(x - 9) = 0$   
 $x = -8, 9$

8.  $x^2 - 81 = 0$   
 $(x + 9)(x - 9) = 0$   
 $x = -9, 9$

9.  $x^2 + 2x - 8 = 0$   
 $(x - 2)(x + 4) = 0$   
 $x = 2, -4$

10.  $x^2 + 5x - 6 = 0$   
 $(x - 1)(x + 6) = 0$   
 $x = 1, -6$

11.  $x^2 + 17x + 72 = 0$   
 $(x + 9)(x + 8) = 0$   
 $x = -9, -8$

12.  $x^2 - 9x + 20 = 0$   
 $(x - 4)(x - 5) = 0$   
 $x = 4, 5$

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

14.  $x^2 - 13x + 36 = 0$   
 $(x - 4)(x - 9) = 0$   
 $x = 4, 9$

15.  $x^2 + 7x + 6 = 0$   
 $(x + 6)(x + 1) = 0$   
 $x = -6, -1$

16.  $x^2 + 5x + 6 = 0$   
 $(x + 3)(x + 2) = 0$   
 $x = -3, -2$

17.  $x^2 + 4x - 45 = 0$   
 $(x + 9)(x - 5) = 0$   
 $x = -9, 5$

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

19.  $x^2 - 10x + 16 = 0$   
 $(x - 8)(x - 2) = 0$   
 $x = 8, 2$

20.  $x^2 - x - 12 = 0$   
 $(x - 4)(x + 3) = 0$   
 $x = 4, -3$