

Solving Quadratic Equations (A)

Name: _____

Date: _____

Solve each equation for x.

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

11. $-x^2 - 15x - 54 = 0$

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

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

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

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

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

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

5. $-x^2 - 2x + 48 = 0$

15. $x^2 - 36 = 0$

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (A) Answers

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

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

11. $-x^2 - 15x - 54 = 0$
 $-(x + 6)(x + 9) = 0$
 $x = -6, -9$

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (B)

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

3. $x^2 + 8x + 15 = 0$

13. $-x^2 - 16x - 64 = 0$

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

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

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

15. $-x^2 + 4x + 32 = 0$

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (B) Answers

Name: _____

Date: _____

Solve each equation for x.

- $-x^2 - 2x + 15 = 0$
 $-(x + 5)(x - 3) = 0$
 $x = -5, 3$
- $-x^2 - 4x + 5 = 0$
 $-(x - 1)(x + 5) = 0$
 $x = 1, -5$
- $x^2 + 8x + 15 = 0$
 $(x + 3)(x + 5) = 0$
 $x = -3, -5$
- $x^2 + 7x + 6 = 0$
 $(x + 6)(x + 1) = 0$
 $x = -6, -1$
- $-x^2 - x + 72 = 0$
 $-(x + 9)(x - 8) = 0$
 $x = -9, 8$
- $x^2 - 8x - 9 = 0$
 $(x - 9)(x + 1) = 0$
 $x = 9, -1$
- $x^2 + 9x + 20 = 0$
 $(x + 4)(x + 5) = 0$
 $x = -4, -5$
- $x^2 + 4x - 21 = 0$
 $(x + 7)(x - 3) = 0$
 $x = -7, 3$
- $-x^2 - 5x + 24 = 0$
 $-(x + 8)(x - 3) = 0$
 $x = -8, 3$
- $-x^2 + 6x + 7 = 0$
 $-(x + 1)(x - 7) = 0$
 $x = -1, 7$
- $x^2 - 10x + 9 = 0$
 $(x - 1)(x - 9) = 0$
 $x = 1, 9$
- $x^2 - 12x + 36 = 0$
 $(x - 6)(x - 6) = (x - 6)^2 = 0$
 $x = 6$
- $-x^2 - 16x - 64 = 0$
 $-(x + 8)(x + 8) = -(x + 8)^2 = 0$
 $x = -8$
- $x^2 + 2x - 8 = 0$
 $(x + 4)(x - 2) = 0$
 $x = -4, 2$
- $-x^2 + 4x + 32 = 0$
 $-(x - 8)(x + 4) = 0$
 $x = 8, -4$
- $x^2 + 7x - 18 = 0$
 $(x + 9)(x - 2) = 0$
 $x = -9, 2$
- $-x^2 - 5x - 6 = 0$
 $-(x + 2)(x + 3) = 0$
 $x = -2, -3$
- $x^2 + 5x - 6 = 0$
 $(x - 1)(x + 6) = 0$
 $x = 1, -6$
- $-x^2 + 3x + 18 = 0$
 $-(x + 3)(x - 6) = 0$
 $x = -3, 6$
- $-x^2 + 8x - 16 = 0$
 $-(x - 4)(x - 4) = -(x - 4)^2 = 0$
 $x = 4$

Solving Quadratic Equations (C)

Name: _____

Date: _____

Solve each equation for x.

1. $-x^2 + 3x + 54 = 0$

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

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

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

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

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

4. $x^2 - 9 = 0$

14. $x^2 - 1 = 0$

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

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

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (C) Answers

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (D)

Name: _____

Date: _____

Solve each equation for x.

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

11. $-x^2 + 25 = 0$

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

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

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

13. $x^2 - 64 = 0$

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

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

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

15. $x^2 - 5x - 24 = 0$

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

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

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

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

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

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

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

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

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

20. $x^2 - 7x - 18 = 0$

Solving Quadratic Equations (D) Answers

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (E)

Name: _____

Date: _____

Solve each equation for x.

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

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

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

12. $-x^2 + 6x + 16 = 0$

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

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

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

14. $-x^2 - 18x - 81 = 0$

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

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

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

16. $x^2 + 4x - 32 = 0$

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

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

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

18. $x^2 + 8x + 15 = 0$

9. $x^2 - 49 = 0$

19. $-x^2 - 4x + 32 = 0$

10. $-x^2 - 13x - 42 = 0$

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

Solving Quadratic Equations (E) Answers

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (F)

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

4. $x^2 - 9x + 18 = 0$

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

5. $-x^2 - 10x - 16 = 0$

15. $-x^2 - 17x - 72 = 0$

6. $x^2 - 17x + 72 = 0$

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (F) Answers

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (G)

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

13. $-x^2 - 16x - 64 = 0$

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

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

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

15. $x^2 - 10x + 21 = 0$

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

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

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

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

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

18. $x^2 - 49 = 0$

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

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

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

20. $-x^2 + 81 = 0$

Solving Quadratic Equations (G) Answers

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (H)

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

5. $-x^2 - x + 42 = 0$

15. $x^2 - 4 = 0$

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

16. $-x^2 - 12x - 35 = 0$

7. $-x^2 - 14x - 48 = 0$

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

8. $-x^2 - 14x - 45 = 0$

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

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

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

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

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

Solving Quadratic Equations (H) Answers

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (I)

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

15. $x^2 - 1 = 0$

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

16. $x^2 - 4x - 32 = 0$

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

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

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

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

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

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

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

20. $-x^2 + 12x - 35 = 0$

Solving Quadratic Equations (I) Answers

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solving Quadratic Equations (J)

Name: _____

Date: _____

Solve each equation for x.

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

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

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

12. $-x^2 - 8x - 15 = 0$

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

13. $x^2 - 16 = 0$

4. $x^2 - 4x - 32 = 0$

14. $x^2 - 81 = 0$

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

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

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

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

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

17. $-x^2 - x + 42 = 0$

8. $-x^2 - 4x + 32 = 0$

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

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

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

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

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

Solving Quadratic Equations (J) Answers

Name: _____

Date: _____

Solve each equation for x.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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