

Name: _____

Date: _____

Systems of Equations

Grades 6 – 8 • 50 questions • Show your work

- 1.** Solve the system:

$$4x - 4y = -4$$

$$3x - 2y = -4 \quad \underline{\hspace{2cm}}$$

- 2.** Solve the system:

$$x - 4y = 15$$

$$x + 4y = -17 \quad \underline{\hspace{2cm}}$$

- 3.** Solve the system:

$$4x - y = -1$$

$$2x + y = -5 \quad \underline{\hspace{2cm}}$$

- 4.** Solve the system:

$$4x - 2y = 8$$

$$3x - 2y = 7 \quad \underline{\hspace{2cm}}$$

- 5.** Solve the system:

$$4x + 3y = 2$$

$$4x + 4y = 0 \quad \underline{\hspace{2cm}}$$

- 6.** Solve the system:

$$4x - 4y = 32$$

$$4x + 2y = 8 \quad \underline{\hspace{2cm}}$$

- 7.** Solve the system:

$$3x + y = 10$$

8. Solve the system:
 $x + 4y = 12$
 $2x + 4y = 16$ _____

9. Solve the system:
 $x + 4y = -1$
 $4x + 3y = 9$ _____

10. Solve the system:
 $3x + y = 4$
 $4x + y = 6$ _____

11. Solve the system:
 $4x + 2y = -16$
 $x - y = -1$ _____

12. Solve the system:
 $3x + y = 11$
 $x + 4y = 22$ _____

13. Solve the system:
 $x + 4y = 15$
 $x - 3y = -13$ _____

14. Solve the system:
 $x + 3y = -13$
 $3x + 4y = -24$ _____

15. Solve the system:
 $x - 2y = -9$
 $x + 3y = 11$ _____

16. Solve the system:

$$3x + y = 9$$

$$2x - 2y = -2 \quad \underline{\hspace{2cm}}$$

17. Solve the system:

$$4x + 2y = -26$$

$$x + y = -8 \quad \underline{\hspace{2cm}}$$

18. Solve the system:

$$3x - 2y = -4$$

$$4x + y = 13 \quad \underline{\hspace{2cm}}$$

19. Solve the system:

$$3x - 3y = 6$$

$$3x - y = 0 \quad \underline{\hspace{2cm}}$$

20. Solve the system:

$$x - 3y = 11$$

$$4x - 2y = 24 \quad \underline{\hspace{2cm}}$$

21. Solve the system:

$$3x + 4y = 19$$

$$4x - y = 19 \quad \underline{\hspace{2cm}}$$

22. Solve the system:

$$4x + 2y = -24$$

$$3x + 2y = -20 \quad \underline{\hspace{2cm}}$$

23. Solve the system:

$$3x + y = 13$$

$$4x - 2y = 24 \quad \underline{\hspace{2cm}}$$

24. Solve the system:

$$2x + 4y = 8$$

$$4x - 2y = 6 \quad \underline{\hspace{2cm}}$$

25. Solve the system:

$$3x + 4y = -23$$

$$2x + 4y = -22 \quad \underline{\hspace{2cm}}$$

26. Solve the system:

$$4x + 3y = -4$$

$$3x - 3y = 18 \quad \underline{\hspace{2cm}}$$

27. Solve the system:

$$2x + 3y = -1$$

$$x - 3y = 4 \quad \underline{\hspace{2cm}}$$

28. Solve the system:

$$x + 2y = 7$$

$$4x - 3y = 6 \quad \underline{\hspace{2cm}}$$

29. Solve the system:

$$x - 3y = -4$$

$$x - 4y = -7 \quad \underline{\hspace{2cm}}$$

30. Solve the system:

$$3x + 3y = -3$$

$$x - 2y = 14 \quad \underline{\hspace{2cm}}$$

31. Solve the system:

$$3x - y = -4$$

$$2x - 2y = 0 \quad \underline{\hspace{2cm}}$$

32. Solve the system:

$$x + 2y = -13$$

$$2x - 3y = 2 \quad \underline{\hspace{2cm}}$$

33. Solve the system:

$$4x + 2y = 16$$

$$x + 2y = 7 \quad \underline{\hspace{2cm}}$$

34. Solve the system:

$$2x - y = 6$$

$$x + 2y = 8 \quad \underline{\hspace{2cm}}$$

35. Solve the system:

$$4x + 3y = 5$$

$$3x + 2y = 4 \quad \underline{\hspace{2cm}}$$

36. Solve the system:

$$2x - 3y = -4$$

$$x - y = -3 \quad \underline{\hspace{2cm}}$$

37. Solve the system:

$$x + y = -6$$

$$2x - 3y = 3 \quad \underline{\hspace{2cm}}$$

38. Solve the system:

$$4x + y = -11$$

$$3x - y = -10 \quad \underline{\hspace{2cm}}$$

39. Solve the system:

$$x - 4y = -25$$

$$2x + 3y = 5 \quad \underline{\hspace{2cm}}$$

40. Solve the system:

$$3x - 4y = -35$$

$$x + 2y = 5 \quad \underline{\hspace{2cm}}$$

41. Solve the system:

$$2x - y = -7$$

$$3x - 4y = -3 \quad \underline{\hspace{2cm}}$$

42. Solve the system:

$$3x + 2y = -2$$

$$x - y = -4 \quad \underline{\hspace{2cm}}$$

43. Solve the system:

$$4x - y = 6$$

$$3x + y = 8 \quad \underline{\hspace{2cm}}$$

44. Solve the system:

$$2x + 3y = 7$$

$$3x + 2y = 13 \quad \underline{\hspace{2cm}}$$

45. Solve the system:

$$3x + 2y = 23$$

$$x + 3y = 17 \quad \underline{\hspace{2cm}}$$

46. Solve the system:

$$2x + y = 15$$

$$x + 4y = 25 \quad \underline{\hspace{2cm}}$$

47. Solve the system:

$$4x + y = 13$$

$$4x + 3y = 7 \quad \underline{\hspace{2cm}}$$

48. Solve the system:

$$3x - 2y = -11$$

$$x + 2y = -9 \quad \underline{\hspace{2cm}}$$

49. Solve the system:

$$4x - 2y = -18$$

$$2x + 2y = -12 \quad \underline{\hspace{2cm}}$$

50. Solve the system:

$$4x + 3y = 10$$

$$2x - y = 0 \quad \underline{\hspace{2cm}}$$

Answer Key — Systems of Equations

1. $x = -2, y = -1$

2. $x = -1, y = -4$

3. $x = -1, y = -3$

4. $x = 1, y = -2$

5. $x = 2, y = -2$

6. $x = 4, y = -4$

7. $x = 3, y = 1$

8. $x = 4, y = 2$

9. $x = 3, y = -1$

10. $x = 2, y = -2$

11. $x = -3, y = -2$

12. $x = 2, y = 5$

13. $x = -1, y = 4$

14. $x = -4, y = -3$

15. $x = -1, y = 4$

16. $x = 2, y = 3$

17. $x = -5, y = -3$

18. $x = 2, y = 5$

19. $x = -1, y = -3$

20. $x = 5, y = -2$

21. $x = 5, y = 1$

22. $x = -4, y = -4$

23. $x = 5, y = -2$

24. $x = 2, y = 1$

25. $x = -1, y = -5$

26. $x = 2, y = -4$

27. $x = 1, y = -1$

28. $x = 3, y = 2$

29. $x = 5, y = 3$

30. $x = 4, y = -5$

31. $x = -2, y = -2$

32. $x = -5, y = -4$

33. $x = 3, y = 2$

34. $x = 4, y = 2$

35. $x = 2, y = -1$

36. $x = -5, y = -2$

37. $x = -3, y = -3$

38. $x = -3, y = 1$

39. $x = -5, y = 5$

40. $x = -5, y = 5$

41. $x = -5, y = -3$

42. $x = -2, y = 2$

43. $x = 2, y = 2$

44. $x = 5, y = -1$

45. $x = 5, y = 4$

46. $x = 5, y = 5$

47. $x = 4, y = -3$

48. $x = -5, y = -2$

49. $x = -5, y = -1$

50. $x = 1, y = 2$
