

Chapter - 3

Pair Of Linear Equations In Two Variables.

1. Which of the following is a pair of linear equations in two variables?

a) $x^2 + y^2 = 1$, $x + y = 2$

b) $x + y = 2$, $y - x = 1$

c) $x^2 + y^2 = 1$, $xy = 1$

d) $x + y = 2$, $xy = 1$

Answer: b

2. Which of the following is a solution of the pair of equations $2x + 3y = 7$ and $4x + 6y = 14$?

a) $(x, y) = (0, 2)$

b) $(x, y) = (1, 2)$

c) $(x, y) = (2, 1)$

d) $(x, y) = (3, 0)$

Answer: b

3. Which of the following is a solution of the pair of equations $3x - 2y = 4$ and $6x - 4y = 8$?

a) $(x, y) = (1, 2)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (2, 4)$

d) $(x, y) = (4, 2)$

Answer: a

4. Which of the following is a solution of the pair of equations $x + y = 5$ and $2x - y = 1$?

- a) $(x, y) = (1, 4)$
- b) $(x, y) = (2, 3)$
- c) $(x, y) = (3, 2)$
- d) $(x, y) = (4, 1)$

Answer: b

5. Which of the following is a solution of the pair of equations $4x - 3y = 5$ and $8x - 6y = 10$?

- a) $(x, y) = (0, 0)$
- b) $(x, y) = (1, 1)$
- c) $(x, y) = (2, 3)$
- d) $(x, y) = (3, 2)$

Answer: a

6. Which of the following is a solution of the pair of equations $4x - 3y = 5$ and $8x - 6y = 10$?

- a) $(x, y) = (0, 0)$
- b) $(x, y) = (1, 1)$
- c) $(x, y) = (2, 3)$
- d) $(x, y) = (3, 2)$

Answer: a

7. Which of the following is a solution of the pair of equations $2x + 3y = 1$ and $4x + 6y = 2$?

- a) $(x, y) = (0, 1)$
- b) $(x, y) = (1, 0)$
- c) $(x, y) = (1, -1)$
- d) $(x, y) = (-1, 1)$

Answer: a

8. Which of the following is a solution of the pair of equations $2x - 3y = 1$ and $4x - 6y = 2$?

a) $(x, y) = (0, -1)$

b) $(x, y) = (1, 1)$

c) $(x, y) = (1, -1)$

d) $(x, y) = (-1, 1)$

Answer: a

9. Which of the following is a solution of the pair of equations $3x + 4y = 10$ and $6x + 8y = 20$?

a) $(x, y) = (2, 1)$

b) $(x, y) = (1, 2)$

c) $(x, y) = (3, 2)$

d) $(x, y) = (2, 3)$

Answer: a

10. Which of the following is a solution of the pair of equations $x - y = 1$ and $x + y = 3$?

a) $(x, y) = (1, 2)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (1, 0)$

d) $(x, y) = (0, 1)$

Answer: a

11. Which of the following is a solution of the pair of equations $3x - 2y = 5$ and $6x - 4y = 10$?

a) $(x, y) = (0, -5/2)$

b) $(x, y) = (1, -1/2)$

c) $(x, y) = (2, 3/2)$

d) $(x, y) = (3, 5/2)$

Answer: b

12. Which of the following is a solution of the pair of equations $5x - 2y = 3$ and $10x - 4y = 6$?

a) $(x, y) = (0, -3/2)$

b) $(x, y) = (1, 1/2)$

c) $(x, y) = (2, 5/2)$

d) $(x, y) = (3, 7/2)$

Answer: b

13. Which of the following is a solution of the pair of equations $2x - 5y = 1$ and $4x - 10y = 2$?

a) $(x, y) = (1, 1/2)$

b) $(x, y) = (2, 1/2)$

c) $(x, y) = (1, -1/2)$

d) $(x, y) = (2, -1/2)$

Answer: c

14. Which of the following is a solution of the pair of equations $x + y = 5$ and $2x - y = 1$?

a) $(x, y) = (2, 3)$

b) $(x, y) = (3, 2)$

c) $(x, y) = (1, 4)$

d) $(x, y) = (4, 1)$

Answer: a

15. Which of the following is a solution of the pair of equations $3x + 5y = 7$ and $6x + 10y = 14$?

a) $(x, y) = (1, 0)$

b) $(x, y) = (0, 1)$

c) $(x, y) = (2, 1)$

d) $(x, y) = (1, 2)$

Answer: a

16. Which of the following is a solution of the pair of equations $2x - 3y = 4$ and $4x - 6y = 8$?

a) $(x, y) = (2, 0)$

b) $(x, y) = (1, 2)$

c) $(x, y) = (0, -4/3)$

d) $(x, y) = (2, -2/3)$

Answer: a

17. Which of the following is a solution of the pair of equations $4x - y = 7$ and $2x + y = 1$?

a) $(x, y) = (2, -3)$

b) $(x, y) = (1, -3)$

c) $(x, y) = (-1, 3)$

d) $(x, y) = (-2, 3)$

Answer: c

18. Which of the following is a solution of the pair of equations $3x - y = 4$ and $9x - 3y = 12$?

a) $(x, y) = (1, -1)$

b) $(x, y) = (2, 2)$

c) $(x, y) = (0, 4)$

d) $(x, y) = (3, 9)$

Answer: a

19. Which of the following is a solution of the pair of equations $2x + 3y = 5$ and $4x + 6y = 10$?

a) $(x, y) = (0, 5/3)$

b) $(x, y) = (1, 1)$

c) $(x, y) = (-1, 2)$

d) $(x, y) = (2, 1/2)$

Answer: b

20. Which of the following is a solution of the pair of equations $3x - 2y = 5$ and $6x - 4y = 10$?

a) $(x, y) = (1, 1)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (0, -5/2)$

d) $(x, y) = (-1, -2)$

Answer: c

21. Which of the following is a solution of the pair of equations $2x - y = 3$ and $4x - 2y = 6$?

a) $(x, y) = (3, 6)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (1, -1)$

d) $(x, y) = (0, 3)$

Answer: d

22. Which of the following is a solution of the pair of equations $x + y = 6$ and $x - y = 2$?

a) $(x, y) = (4, 2)$

b) $(x, y) = (3, 3)$

c) $(x, y) = (2, 4)$

d) $(x, y) = (1, 5)$

Answer: c

23. Which of the following is a solution of the pair of equations $x + y = 7$ and $3x - y = 11$?

a) $(x, y) = (3, 4)$

b) $(x, y) = (2, 5)$

c) $(x, y) = (1, 6)$

d) $(x, y) = (4, 3)$

Answer: a

24. Which of the following is a solution of the pair of equations $2x - 3y = 1$ and $4x - 6y = 2$?

a) $(x, y) = (-1/2, -1/2)$

b) $(x, y) = (1/2, 1/2)$

c) $(x, y) = (1/2, -1/2)$

d) $(x, y) = (-1/2, 1/2)$

Answer: c

25. Which of the following is a solution of the pair of equations $x + y = 4$ and $2x + 2y = 8$?

a) $(x, y) = (2, 2)$

b) $(x, y) = (3, 1)$

c) $(x, y) = (1, 3)$

d) $(x, y) = (4, 0)$

Answer: a

26. Which of the following is a solution of the pair of equations $3x + 2y = 8$ and $6x + 4y = 16$?

a) $(x, y) = (2, 1)$

b) $(x, y) = (0, 4)$

c) $(x, y) = (1, 2)$

d) $(x, y) = (-1, 4)$

Answer: a

27. Which of the following is a solution of the pair of equations $3x - y = 5$ and $6x - 2y = 10$?

a) $(x, y) = (3, 4)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (1, 2)$

d) $(x, y) = (4, 3)$

Answer: b

28. Which of the following is a solution of the pair of equations $2x - 5y = -1$ and $4x - 10y = -2$?

a) $(x, y) = (1, 1/2)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (-1/2, 1/4)$

d) $(x, y) = (0, -1/5)$

Answer: a

29. Which of the following is a solution of the pair of equations $3x - y = 2$ and $6x - 2y = 4$?

a) $(x, y) = (1, 1)$

b) $(x, y) = (2, 4)$

c) $(x, y) = (0, 2)$

d) $(x, y) = (-1, -5)$

Answer: c

30. Which of the following is a solution of the pair of equations $x + 2y = 5$ and $2x + 4y = 10$?

- a) $(x, y) = (2, 1)$
- b) $(x, y) = (1, 2)$
- c) $(x, y) = (3, 1)$
- d) $(x, y) = (0, 2)$

Answer: b

31. Which of the following is a solution of the pair of equations $2x + y = 7$ and $4x + 2y = 14$?

- a) $(x, y) = (1, 5)$
- b) $(x, y) = (2, 3)$
- c) $(x, y) = (3, 1)$
- d) $(x, y) = (4, -1)$

Answer: a

32. Which of the following is a solution of the pair of equations $3x + 4y = 1$ and $6x + 8y = 2$?

- a) $(x, y) = (1, 0)$
- b) $(x, y) = (0, 1)$
- c) $(x, y) = (-1, 2)$
- d) $(x, y) = (2, -1)$

Answer: a

33. Which of the following is a solution of the pair of equations $2x - 3y = 4$ and $4x - 6y = 8$?

- a) $(x, y) = (2, -2)$
- b) $(x, y) = (4, 0)$
- c) $(x, y) = (1, 2)$
- d) $(x, y) = (0, -4/3)$

Answer: d

34. Which of the following is a solution of the pair of equations $3x - 2y = 1$ and $6x - 4y = 2$?

- a) $(x, y) = (1, 1/2)$
- b) $(x, y) = (2, 1)$
- c) $(x, y) = (-1/2, -1)$
- d) $(x, y) = (0, 1/3)$

Answer: a

35. Which of the following is a solution of the pair of equations $2x - y = 3$ and $4x - 2y = 6$?

- a) $(x, y) = (3, 6)$
- b) $(x, y) = (2, -1)$
- c) $(x, y) = (1, 1)$
- d) $(x, y) = (0, -3)$

Answer: b

36. Which of the following is a solution of the pair of equations $3x + 2y = 8$ and $6x + 4y = 16$?

- a) $(x, y) = (1, 2)$
- b) $(x, y) = (2, 1)$
- c) $(x, y) = (4, 0)$
- d) $(x, y) = (0, 8)$

Answer: a

37. Which of the following is a solution of the pair of equations $2x + 3y = 7$ and $4x + 6y = 14$?

- a) $(x, y) = (1, 2)$
- b) $(x, y) = (2, 1)$
- c) $(x, y) = (3, 0)$

d) $(x, y) = (0, 7/3)$

Answer: a

38. Which of the following is a solution of the pair of equations $5x - 2y = 1$ and $10x - 4y = 2$?

a) $(x, y) = (1, 2)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (1/2, 3/4)$

d) $(x, y) = (0, -1/2)$

Answer: c

39. Which of the following is a solution of the pair of equations $2x - 5y = 1$ and $4x - 10y = 2$?

a) $(x, y) = (1, -1/2)$

b) $(x, y) = (2, -3/2)$

c) $(x, y) = (0, -1/5)$

d) $(x, y) = (-3, 1/2)$

Answer: c

40. Which of the following is a solution of the pair of equations $3x - 2y = 5$ and $6x - 4y = 10$?

a) $(x, y) = (2, 1)$

b) $(x, y) = (1, -2)$

c) $(x, y) = (-1, -4)$

d) $(x, y) = (0, 5/2)$

Answer: d

41. Which of the following is a solution of the pair of equations $4x - 3y = 5$ and $8x - 6y = 10$?

a) $(x, y) = (1, -1)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (0, -5/3)$

d) $(x, y) = (-1, -1/4)$

Answer: c

42. Which of the following is a solution of the pair of equations $3x + 4y = 10$ and $6x + 8y = 20$?

a) $(x, y) = (1, 2)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (0, 5/2)$

d) $(x, y) = (-2, 4)$

Answer: a

43. Which of the following is a solution of the pair of equations $7x - 3y = 4$ and $14x - 6y = 8$?

a) $(x, y) = (1, 3)$

b) $(x, y) = (2, 1)$

c) $(x, y) = (0, -4/3)$

d) $(x, y) = (-1, -1)$

Answer: c

44. Which of the following is a solution of the pair of equations $2x - 7y = 3$ and $4x - 14y = 6$?

a) $(x, y) = (1, 1)$

b) $(x, y) = (2, -1)$

c) $(x, y) = (3, 0)$

d) $(x, y) = (-1, -2)$

Answer: c

45. Which of the following is a solution of the pair of equations $5x - 9y = 0$ and $15x - 27y = 0$?

- a) $(x, y) = (1, 2)$
- b) $(x, y) = (3, 5)$
- c) $(x, y) = (0, 0)$
- d) $(x, y) = (2, 3)$

Answer: c

46. Which of the following is a solution of the pair of equations $4x - 2y = 6$ and $8x - 4y = 12$?

- a) $(x, y) = (1, 0)$
- b) $(x, y) = (2, -3)$
- c) $(x, y) = (0, -3)$
- d) $(x, y) = (-1, 2)$

Answer: b

47. Which of the following is a solution of the pair of equations $2x + 3y = 7$ and $4x + 6y = 14$?

- a) $(x, y) = (1, 2)$
- b) $(x, y) = (2, 1)$
- c) $(x, y) = (0, 7/3)$
- d) $(x, y) = (-1, -4)$

Answer: c

48. Which of the following is a solution of the pair of equations $3x - 2y = 8$ and $6x - 4y = 16$?

- a) $(x, y) = (2, 5)$
- b) $(x, y) = (1, -2)$
- c) $(x, y) = (4, 0)$
- d) $(x, y) = (-2, -1)$

Answer: c

49. Which of the following is a solution of the pair of equations $2x + y = 5$ and $3x - y = 1$?

- a) $(x, y) = (2, 1)$
- b) $(x, y) = (1, 2)$
- c) $(x, y) = (1, -2)$
- d) $(x, y) = (-1, 3)$

Answer: a

50. Which of the following is a solution of the pair of equations $5x + 4y = 17$ and $3x + 2y = 9$?

- a) $(x, y) = (1, 2)$
- b) $(x, y) = (2, 1)$
- c) $(x, y) = (1, 3)$
- d) $(x, y) = (3, 1)$

Answer: d