Choose the correct answers in each of the following questions :

1. $x = 2, y = -1$ is a solution of the line equal to :

(A) $2x + 3y = 5$ (B) $x + y = 5$

(C) $x + y = 1$ (D) $x - y = 9$

2. The graph of the equation $2x - 3 = 3x - 5$ is parallel to :

(A) x-axis (B) y-axis

(C) both the axes (D) none of these

3. The graph of the lines $x + y = 7$ and $x - y = 3$ meet at the point :

(A) (5, 2) (B) (2, 5)

(C) (6, 3) (D) (–1, 4)

4. Which of the following equations is not linear equation :

(A) $2x + 3 = 7x - 2$ (B) $x + 5 = 3x - 4$

(C) $x^2 + 3 = 5x - 3$ (D) $(x - 2)^2 = x^2 + 8$

5. The solution of the equations $x + y = 3, 3x - 2y = 4$ is :

(A) $x = 2, y = 1$ (B) $x = 1, y = 2$

(C) $x = -2, y = 1$ (D) $x = -2, y = -1$

6. The value of x satisfying the equation $x^2 + p^2 = (q - x)^2$ is :

(A) $\frac{p^2 - q^2}{2}$ (B) $\frac{q^2 - p^2}{2q}$

(C) $\frac{q^2 - p^2}{2}$ (D) $\frac{p^2 - q^2}{2q}$

7. If $2x^2 + xy - 3y^2 + x + ay - 10 = (2x + 3y + b)(x - y - 2)$ the value of a and b are :

(A) 11 and 5 (B) 1 and -5

(C) -1 and -5 (D) -11 and 5

8. If (2, 0) is a solution of the linear equation $x + 3y = k$, then the value of k is : **[NCERT Exemplar]**

(A) 4 (B) 6

(C) 5 (D) 2

9. The graph of the linear equation $2x + 3y = 6$ cuts the y-axis at the point : **[NCERT Exemplar]**

(A) (2, 0) (B) (0, 3)

(C) (3, 0) (D) (0, 2)

10. Any point on the x-axis is of the form : **[NCERT Exemplar]**

(A) (x, y) (B) (0, y)

(C) (x, 0) (D) (x, x)

11. Any point on the line $y = x$ is of the form : **[NCERT Exemplar]**

(A) (a, a) (B) (0, a)

(C) (a, 0) (D) a, - a)

12. The equation of x-axis is of the form : [NCERT Exemplar]

(A) $x = 0$ (B) $y = 0$

(C) $x + y = 0$ (D) $x = y$

13. How many linear equation in x and y can be satisified by $x = 1$ and $y = 2$? [NCERT Exemplar]

(A) Only one (B) Two

(C) Infinitely many (D) Three

14. The graph of the linear equation $2x + 5y = 10$, meets the x-axis at the point :

(A) (0, 2) (B) (2, 0)

(C) (5, 0) (D) (0, 5)

15. The graph of the line $x = 3$ passes through the point :

(A) (0, 3) (B) (2, 3)

(C) (3, 2) (D) None of these

16. If the point (3, 4) lies on the graph of $3y = ax + 7$, then the value of a is :

(A) $\frac{2}{5}$ (B) $\frac{5}{3}$

(C) $\frac{3}{5}$ (D) $\frac{2}{7}$

17. $x = 5$, $y = 2$ is a solution of the linear equation :

(A) $x + 2y = 7$ (B) $5x + 2y = 7$

(C) $x + y = 7$ (D) $5x + y = 7$

18. The graph of the line $x - y = 0$ passes through the point :

(A) $\left(-\frac{1}{2}, \frac{1}{2}\right)$ (B) $\left(\frac{3}{2}, -\frac{3}{2}\right)$

(C) (0, – 1) (D) (1, 1)

19. The graph of the line $y = -3$ does not pass through the point :

(A) (2, – 3) (B) (3, – 3)

(C) (0, – 3) (D) (– 3, 2)

20. The point of the form (a, a), $a \neq 0$ lies on :

(A) The x-axis (B) The y-axis

(C) The line $y = x$ (D) The line $x + y = 0$

ANSWERS