

#### ADEMIC YEAR 2022-23

# Worksheet No. 1

## **Subject:MATHEMATICS**

#### **Grade: IX** CH-4- LINEAR EQUATIONS IN TWO VARIABLES

71	184		471		-	42.48	475
1	Any	point o	n the	y = x	15	of the	torm

- (a) (a, a)
- (b) (0, a)
- (e) (a, 0)
- (d) (a, -a)

### The equation of x –axis is of the form.

- (a) x = 0
- (b) y = 0
- (e) x + y = 0
- (d)  $\mathbf{x} = \mathbf{y}$

#### 3. Graph of y = 6 is a line:

- (a) parallel to x axis at a distance 6 units from the origin
- (b) parallel to y axis at a distance 6 units from the origin
- (c) making an intercept 6 on the x -axis.
- (d) making an intercept 6 on both the axes.

#### 4. 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

### 5. If a linear equation has solutions (-2, 2), (0, 0) and (2, -2), then its is of the form

- (a) y x = 0 (b) x + y = 0 (c) -2x + y = 0
- (d) -x + 2y = 0

#### **6.** The graph of the linear equation in two variables y = mx is

- (i) a line parallel to x axis
- (b) a line parallel to y axis
- (c) a line passing through the origin (d) not a straight line

#### 7. If the point (3, 4) lies on the graph of 3y = ax + 7, then find the value of a.

- 8. How many solution(s) of the equation 2x + 1 = x 3 are there on the :
  - (i) Number line (ii) Cartesian plane
- 9. Let y varies directly as x. If y = 12 when x = 4, then write a linear equation. What is the value of v when x = 5?
- 10. The following values of x and y are thought to satisfy a linear equation:

X	1	2
y	1	3

Draw the graph, using the values of x, y as given in the above table. At what point the graph of the linear equation (i) cuts the x-axis. (ii) cuts the y-axis.

- 11. Solve the equation 2x + 1 = x 3, and represent the solution(s) on
  - (ii)the number line,
  - (iii)the Cartesian plane.

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