Chapter 03.
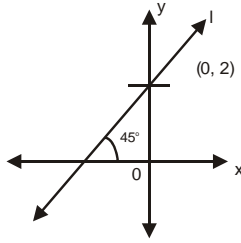## THE GENERAL EQUATIONS OF STRAIGHT LINES

1) The equation of the line passing through the points (-1, 1), (- 1, - 1) and (- 1, 0) is

A) $y = - x + 1$
B) $y = - 1$
C) $x = -1$
D) $x + y = - 1$

Answer: C

2) Equation of the line l given in the figure is

A) $y = 2x + 1$
B) $y = 2x - 1$
C) $y = x + 2$
D) $y = x - 2$

Answer: C

3) The equation of the line passing through the points (1, 0) and (0, 1) is

A) $x - y = 1$
B) $x + y = 1$
C) $x + y = - 1$
D) $x - y = - 1$

Answer: B

4) The point of insertion of the lines $3x + 4y = 0$ and $5x - 6y = 0$

A) (3, 4)
B) (5, - 6)
C) (3, 5)
D) (0, 0)

Answer: D

5) The three lines define by the equation $x + 2y = 0$, $2x + y = 0$ and $3x + 5y = 0$ are

A) Parallel
B) Perpendicular
C) Concurrent
D) Not parallel

Answer: C

6) The length and breadth of a plane is

A) finite
B) infinite
C) x, y
D) x + y

Answer: B

7) The distance of the point (7, 0) from the line $y - 2 = 0$ is

A) 7
B) 2
C) 5
D) 0

Answer: B

8) The distance of the point (2, 3) from the line $x + y = 5$ is

A) 2
B) 0
C) 3
D) 5

Answer: B

9) The distance between the two lines, defined by $y - 2 = 0$ and $y + 2 = 0$

A) 0
B) 2
C) 4
D) ¼

Answer: C

10) The equation $3x^2 - 4xy + 5y^2 = 0$ is called

A) Quadratic
B) Linear
C) Explicit
D) Homogeneous

Answer: D

11) The angle between the pair of lines represented by , $3x^2 - 4xy - 3y^2 = 0$ is

A) $\pi/2$
B) $\pi/3$
C) $\pi/4$
D) $\pi/6$

Answer: A

12) If the two lines represented by the equation $ax^2 + 2hxy + by^2 = 0$ are perpendicular then,

A) $a = b$
B) $h = ab$
C) $a + b = 0$
D) $h = a + b$

Answer: C

13) The pair of lines represented by $y^2 - 36 = 0$ are

A) Parallel
B) Perpendicular
C) Non parallel

D) Coincident

Answer: A

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