



1	The general equation of line is
	a) $y = mx + c$ b) $Ax + By + C = 0$ c) $x \cos \alpha + y \sin \alpha = p$ d) $y - y_1 = m(x - x_1)$
2	Two opposite vertices of a rectangle are (1, 3) and (5, 1). If the equation of a diagonal of this rectangle is $y = 2x + c$ then the value of c is
	a) 1 b) 2 c) - 4 d) - 9
3	The distance between the lines $3x + 4y = 9$ and $6x + 8y = 15$ is
	a) 6 b) 3 c) $1/3$ d) $3/10$
4	The inclination of the line $x - y + 3 = 0$ with the positive direction of x-axis is
	a) 45^0 b) 135^0 c) $- 135^0$ d) $- 45^0$
5	The equation of the line passing through (1, 2) and perpendicular to $x + y + 7 = 0$ is
	a) $y - x + 1 = 0$ b) $y - x - 1 = 0$ c) $y - x + 2 = 0$ d) $y - x - 2 = 0$
6	If the line $\frac{x}{a} + \frac{y}{b} = 1$ passes through the points (2, -3) and (4, -5) then (a, b) is
	a) (1, 1) b) (1, -1) c) (-1, 1) d) (-1, -1)
7	The equations of the lines which pass through the point (3, -2) and are inclined at 60° to the line $\sqrt{3}x + y = 1$ are
	a) $y + 2 = 0, \sqrt{3}x - y - 2 - 3\sqrt{3} = 0$ c) $\sqrt{3}x - y - 2 - 3\sqrt{3} = 0$ b) $x - 2 = 0, \sqrt{3}x - y + 2 + 3\sqrt{3} = 0$ d) None of these
8	Equation of the line passing through (1, 2) and parallel to the line $y = 3x - 1$ is
	a) $y - 2 = x - 1$ b) $y + 2 = x + 1$ c) $y - 2 = 3(x - 1)$ d) $y + 2 = 3(x + 1)$
9	Slope of a line which cuts off intercepts of equal lengths on the axes is
	a) - 1 b) 2 c) 0 d) $\sqrt{3}$
10	A point equidistant from the lines $4x + 3y + 10 = 0, 5x - 12y + 26 = 0$ and $7x + 24y - 50 = 0$ is
	a) (1, 1) b) (1, - 1) c) (0, 1) d) (0, 0)
11	One vertex of the equilateral triangle with centroid at the origin and one side as $x + y - 2 = 0$ is
	a) (-1, - 1) b) (2, 2) c) (-2, -2) d) (2, -2)
12	Line through the points (-2, 6) and (4, 8) is perpendicular to the line through the points (8, 12) and (x, 24). The value of x is
	a) 4 b) 3 c) 2 d) 1

- 13 A point on the x-axis, which is equidistant from the points (7, 6) and (3, 4) is
 a) $(1/2, 0)$ b) $(15/2, 0)$ c) (1, 7) d) (15, 2)
- 14 The distance of the point P (1, -3) from the line $2y - 3x = 4$ is
 a) 13 b) $\sqrt{13}$ c) $1/\sqrt{13}$ d) $\sqrt{3}$
- 15 The value of x for which the points (x, -1), (2,1) and (4, 5) are collinear is
 a) 0 b) -1 c) 1 d) none of these
- 16 The equations of the lines parallel to axes and passing through (-2, 3) are
 a) $x = -2, y = 3$ b) $x = 2, y = -3$ c) $x = 3, y = -2$ d) $x = -3, y = 2$
- 17 The equation of the line through the points (1, -1) and (3, 5) is
 a) $3x + y + 4 = 0$ b) $-3x + y + 4 = 0$ c) $3x - y + 4 = 0$ d) none of these
- 18 The equation of the line, which makes intercepts -3 and 2 on the x- and y-axes respectively is..
 a) $2x + 3y + 6 = 0$ b) $2x + 3y - 6 = 0$ c) $2x + 3y - 6 = 0$ d) $2x - 3y + 6 = 0$
- 19 The angle between the lines $x + 2y = 3$ and $y - 2x = 5$ is
 a) 45° b) 60° c) 90° d) 0°
- 20 Which of the following equation of line is not passing through origin (0, 0)?
 a) $x + 7y = 23$ b) $13x - 4y = 2x$ c) $(x + 6) = 2(y + 3)$ d) $(x - 1) - (y - 1) = 0$
- 21 The slope of the line $ax + by + c = 0$ is
 a) a/b b) $-a/b$ c) $-c/b$ d) c/b

CASE STUDY

A girl standing at the junction (crossing) of two straight paths represented by the equations $2x - 3y + 4 = 0$ and $3x + 4y - 5 = 0$ wants to reach the path whose equation is $6x - 7y + 8 = 0$ in the least time.

- 21 Equation of path that she should follow is
 22 The y- intercept of the path used to reach in least time at $6x - 7y + 8 = 0$ is
 23 The x - intercept of the path used to reach in least time at $6x - 7y + 8 = 0$ is

Answer Key

1	B	6	D	11	B	16	A	21	B
2	C	7	A	12	A	17	B	22	$119x + 102y = 125$
3	D	8	C	13	B	18	D	23	$125/102$
4	A	9	A	14	B	19	C	24	$125/119$
5	B	10	D	15	C	20	A		