

FA Part 2 Mathematics Chapter 4 Test Online

Sr	Questions	Answers Choice
1	$y - y_1 = m(x - x_1)$ is the equation of straight line in:	A. Slope-intercept form B. Point-slope form C. Normal form D. Intercepts form
2	The centroid of the triangle whose vertices are (3, -5), (-7, 4) and (10, -2) is:	A. (-2, -2) B. (-2, 2) C. (2, -1) D. (0, 0)
3	The distance of any point P (x, y) from the origin O(0, 0) is given by:	
4	If (x, y) are the coordinate of a point ordered pair is called:	A. Abscissa B. Ordinate C. Coordinate D. Ordered pair
5	The centroid of a triangle is a point that divides each median in the ratio:	A. 2 : 1 B. 2 : 3 C. 1 : 3 D. 4 : 3
6	The line l is horizontal if and only if slope is equal to:	A. 0 B. 1 C. 2 D. undefined
7	If (x, y) are the coordinates of a point, then the first component of the ordered pair is called:	A. Abscissa B. Ordinate C. Coordinate axes D. None of these
8	If $a = 0$, then the line $ax + by + c = 0$ is parallel to:	A. y - axis B. x - axis C. along y - axis D. None of these
9	For any point (x, y) and y - axis:	A. $y = 0$ B. $y = -1$ C. $y = 1$ D. $x = 0$
10	The point of intersection of the perpendicular bisectors of a triangle is called:	A. Centroid B. Ortho-center C. Circums-center D. In-center
11	The distance between the points (1, 2), (2, 1).	A. 1 D. 2
12	A pair of lines of homogeneous second degree equation $ax^2 + 2hxy + by^2 = 0$ are orthogonal, if:	A. $a - b = 0$ B. $a + b = 0$ C. $a + b > 0$ D. $a - b < 0$
13	$x = c$ is a line:	A. Perpendicular to x-axis B. Parallel to x-axis C. Perpendicular to y-axis D. None of these
14	Question Image	A. Parallel lines B. Perpendicular lines C. Non-parallel lines D. None of these
15	The line $y = c$ is above the x - axis, if:	A. $c > 0$ B. $c < 0$ C. $c = 0$
16	Two non parallel lines intersect each other at:	A. 1 point B. 2 points C. 3 points D. 4 points

17	The ratio in which y-axis divides the line joining (2, -3) and (-5, 6) is:	A. 2 : 3 B. 2 : 5 C. 1 : 2 D. 3 : 5
18	Joint equation of $y + 2x = 0$, $y - 3x = 0$ is:	A. $(y+2x)(y-3x) = 0$ B. $(y-2x)(y-3x) = 0$ C. $(y+2x)(y+3x) = 0$ D. $(y-2x)(y+3x) = 0$
19	The point (2, 5) lies the lie $3x - y + 1 = 0$	A. Above B. Below C. On D. None
20	X-coordinate of any point on Y-axis:	A. 0 B. x C. y D. 1
21	If a pair of opposite sides of a quadrilateral are equal and parallel then it is:	A. Rectangle B. Rhombus C. Parallelogram D. None of these
22	If a straight line is perpendicular to x-axis, then its slope is:	A. 0 B. 1 C. 2 D. Undefined
23	The perpendicular distance of the line $3x + 4y + 10 = 0$ from the origin is:	A. 0 B. 1 C. 2 D. 3
24	In the translation of axes which formula is true:	A. $x = X + h$ B. $X = x + h$ C. $x + X = h$ D. None
25	Question Image	A. Line parallel to x-axis B. Line parallel to y-axis C. Line passing through the origin D. Both (a) and (b)
26	If a straight line is perpendicular to y-axis, then its slope is:	A. 1 B. -1 C. 0 D. undefined
27	$y = 2x + 3$ is the;	A. Slope-intercept form B. Two points form C. Point slope form D. Intercepts form
28	If (1, x) is the mid point of the line segment joining the points (1, 2) & (1, 6) then x =	A. 1 B. 2 C. 3 D. 4
29	A quadrilateral having two parallels and two non-parallel sides is called:	A. Trapezium B. Rectangle C. Rhombus D. None of these
30	Equation of a line parallel to x-axis:	A. $x = 0$ B. $x = y$ C. $y = a$ D. $x = a$
31	y-coordinate of any point on X-axis:	A. 0 B. x C. y D. 1
32	General form of equation of line is:	A. $ax - by + c = 0$ B. $ax + by - c = 0$ C. $ax + by + c = 0$ D. $ax - by - c = 0$
33	Question Image	A. Parallel lines B. Non-parallel lines C. Perpendicular lines D. Coplanar lines
34	$y = mx + c$ is the equation of straight line in:	A. Slope-intercept form B. Two points from C. Point slope form D. Intercepts form

35	The ratio in which the line segments joining (2, 3) and (4, 1) is divided by the line joining (1, 3) and (4, 3) is:	A. 2 : 1 B. 3 : 1 C. 1 : 2 D. 1 : 1
36	Distance of the point (-3, 7) from x-axis is:	A. 3 B. -3 C. 7 D. 10
37	Question Image	A. 0 B. 2 C. 1 D. -1
38	Question Image	
39	If the directed distances AP and PB have the opposite signs, i.e; p is beyond AB, then their ratio is negative and P is said to divide AB:	A. Internally B. May divide C. Externally D. None of these
40	If in the case of translation of axes, O (-3, 2), (x, y) = (-6, 9) then (X, Y) =	A. (-3, 9) B. (-3, 7) C. (-9, 11) D. (3, 7)
41	X-co-ordinate of centroid of triangle ABC with A(-2, 3); B(-4, 1); C(3, 5) equals:	A. -1 B. 1 C. 3 D. -3
42	$x = 4$ is a line:	A. Parallel to x - axis B. Parallel to y - axis C. Perpendicular to y-axis D. None of these
43	The equation of a straight line which parallel to the line $3x - 2y + 5 = 0$ and passes through (2, -1) is:	A. $3x + 2y - 8 = 0$ B. $3x - 2y + 8 = 0$ C. $3x - 2y - 8 = 0$ D. $3x + 2y + 8 = 0$
44	The point of intersection of internal bisectors of the angles of a triangle is called:	A. Centroid B. Ortho-centers C. Circums-center D. In-center
45	Question Image	A. Line parallel to x-axis B. Line parallel to y-axis C. Line passing through the origin D. Both (a) and (b)
46	The distance between two points $P_1 (x_1, y_1)$ and $P_2 (x_2, y_2)$ on the co-ordinate plane is given by:	
47	The ratio in which x-axis divides the line segment joining the points:	A. 1 : 1 B. 1 : 3 C. 1 : 5 D. 1 : 2
48	A parallelogram is a rhombus if and only if its diagonals are:	A. Parallel B. Perpendicular C. Equal D. None of these
49	If the inclination of a line lies between $]90^\circ, 180^\circ[$, then the slope of line is :	A. Positive B. Negative C. Zero D. undefined
50	$ax + by + c = 0$, will represent equation of straight line parallel y-axis if:	A. $a = 0$ B. $b = 0$ C. $c = 0$ D. $a = 0, c = 0$
51	Question Image	A. Line parallel to x - axis B. Line parallel to y - axis C. Inclined D. Both (a) and (b)
52	A linear equation in two variables represents:	A. Circle B. Ellipse C. Hyberbola D. Straight line

53	If (2, 1) is the mid point of the line segment joining the points (2, x) & (2, -5) then x =	B. 4 C. 7 D. -7
54	The line $x = a$ is on the right of y - axis if:	A. $a > 0$ B. $a < 0$ C. $a = 0$
55	The pair of lines of homogeneous second-degree equation $ax^2 + 2hxy + by^2 = 0$ are real and coincident, if:	A. $h^2 < ab$ B. $h^2 > ab$ C. $h^2 = ab$ D. None of these
56	Question Image	D. 2
57	Distance of the point (-2, 3) from y-axis is:	A. -2 B. 2 C. 3 D. 1
58	For any point (x, y) on x-axis:	A. $y = 1$ B. $y = 0$ C. $y = -1$ D. $y = 2$
59	The equation to the straight line which passes through the point (2, 9) and makes an angle of 45° with x-axis is:	A. $x + y + 7 = 0$ B. $x - y + 7 = 0$ C. $y - x + 7 = 0$ D. None of these
60	The point of intersection of the altitudes of a triangle is called:	A. Centroid B. Ortho-center C. Circums-center D. In-center
61	The point (5, 8) lies the line $2x - 3y + 6 = 0$	A. Above B. Below C. On D. None
62	y - ordinate of the centroid of triangle with vertices A(-2, 3) B(-4, 1), C(3, 2) is:	A. 3 B. 1 C. 2 D. 0
63	Angle between the lines $x + y + 1 = 0$ & $x - y + 4 = 0$ is:	A. 30° B. 45° C. 60° D. 90°
64	Infinite number of lines can pass through:	A. One point B. Two points C. Three points D. Four points
65	The coordinate axes divide the plane into----- equal parts:	A. 1 B. 2 C. 3 D. 4
66	Inclination of Y-axis or of any line parallel to Y-axis is:	B. Zero D. Undefined
67	Question Image	A. 4 B. 2 C. 1
68	The vertical line y'oy is called:	A. x-axis B. y-axis C. abscissa D. Ordinate
69	Point of intersection of lines $x - 2y + 1 = 0$ and $2x - y + 2 = 0$ equals:	A. (1, 0) B. (0, 1) C. (-1, 0) D. (0, -1)
70	$y = -2$ is a line:	A. Parallel to x-axis B. Parallel to y-axis C. Perpendicular to x-axis D. None of these
71	Question Image	A. Line parallel to x-axis B. Line parallel to y-axis C. Line passing through the origin D. Both (a) and (b)
72	Equation of the line parallel to $x + 2y - 9 = 0$ is:	A. $3x - y - 9 = 0$ B. $3x + 9y + 7 = 0$

72	Equation of the line parallel to $x + 3y - 9 = 0$ is:	C. $2x - 6y - 18 = 0$ D. $x - 3y + 9 = 0$
73	If the inclination of the line l lies between $]0^\circ, 90^\circ[$, then the slope of l is:	A. Positive B. Negative C. Undefined D. None of these
74	If the directed distances AP and PB have same signs, then their ratio is positive and P is said to divide AB :	A. Internally B. May be divide C. Externally D. None of these
75	The symbol $ $ is used for:	A. Parallel lines B. Perpendicular lines C. Non-parallel lines D. None of these
76	If the line l is parallel to y -axis, then the slope of l is -----.	A. 0 B. 1 C. -1 D. undefined
77	The point of intersection of the medians of a triangle is called:	A. Centroid B. Ortho-center C. Circums-center D. In-center
78	Inclination of X -axis or of any line parallel to X -axis is:	A. Zero D. Undefined
79	$ax + by + c = 0$ has matrix form as:	B. $ ax + by = -c $ C. $[ax + by] = [c]$ D. $[ax - by] = [-c]$
80	The horizontal line $x'ox$ is called:	A. x -axis B. y -axis C. abscissa D. ordinate
81	The line $y = a$ is below the x -axis, if:	A. $a > 0$ B. $a < 0$ C. $a = 0$
82	Point of intersection of $x + y = 5$ & $x - y = 3$ is:	A. (5, 5) B. (4, 2) C. (4, 1) D. (1, 4)