

## ECAT Mathematics Chapter 21 Linear Inequalities and Linear Programming

Sr	Questions	Answers Choice
1	$3x + 4 > 0$ is	A. equation B. identity C. inequality D. none of these
2	$x = -1$ is in the solution of the inequality	A. $x + 5 \leq 0$ B. $2x + 3 < 0$ C. $x \geq 0$ D. $2x + 3 \geq 0$
3	The set of ordered pairs $(x,y)$ such that $ax + by < c$ , and $(x,y)$ such that $ax + by > 0$ , are called	A. Half planes B. Boundary C. Linear Inequalities D. Feasible regions
4	Which is not a half plane	A. $ax + by \leq c$ B. $ax + by \geq c$ C. Both A and B D. None
5	The points $(x, y)$ which satisfy a linear inequality in two variables $x$ and $y$ from its	A. domain B. range C. solution D. none of these
6	The point _____ is in the solution of the inequality $4x - 3y < 2$	A. (0,1) B. (2,1) C. (2,2) D. (3,3)
7	Optimal solution is found by evaluation the objective function at	A. All point of feasible region B. Corner point C. Origin D. None
8	For which of the following ordered pairs $(s, t)$ is $s + t > 2$ and $s - t < -3$ ?	A. (3, 2) B. (2, 3) C. (1, 8) D. (0, 3)
9	$3x + 4 = 0$ is	A. not inequality B. equation C. identity D. inequality
10	The point _____ is in the solution of the inequality $2x + 3y < 5$	A. (1,1) B. (2,2) C. (0,1) D. (0,2)
11	A point of a solution region where two of its boundary lines intersect, is called	A. Boundary B. Inequality C. Half plane D. Vertex
12	A point where two of its boundary lines intersect is called	A. Corner point B. Feasible point C. Vertex D. Feasible solution
13	The real numbers which satisfy an inequality form its	A. solution B. coefficient C. domain D. range
14	The corner point of the boundary lines, $x - 2x + 2y = 10$ is:	A. (8,1) B. (1,8) C. (6,10) D. (3,5)
15	An expression involving any of the symbols $<, >, \leq$ or $\geq$ is called	A. equation B. inequality C. linear equation D. identity

16	The graph of $y < 2$ is the	A. Left half plane B. upper half plane C. Right half plane D. Lower half plane
17	Multiplying each side of an inequality by $(-1)$ will:	A. Not effect B. Change the sign C. Become zero D. Not defined
18	$x = \underline{\hspace{2cm}}$ is in the solution of $2x + 3 \geq 0$	A. 1 B. -2 C. -3 D. -4
19	Which is in the solution set of $4x - 3y < 2$	A. (3, 0) B. (4, 1) C. (1, 3) D. None
20	$x$ is a member of the set $[-1, 0, 3, 5]$ $y$ is a member of the set $\{-2, 1, 2, 4\}$ which is possible?	A. $x - y = -6$ B. $x - y < -6$ C. $x - y > -6$ D. None