

ECAT (Pre-Eng) Mathematics Chapter 21 Linear Inequalities & Linear Programming

Sr	Questions	Answers Choice
1	An expression involving any of the symbols $<$, $>$, \leq or \geq is called	A. equation B. inequality C. linear equation D. identity
2	The graph of linear equation $2x + 3y = 10$	A. Parabola B. Circle C. Hyperbola D. Straight line
3	$3x + 4 \leq 0$ is	A. not inequality B. equation C. identity D. inequality
4	The graph of the linear equation of the form $ax + by = c$ is a line which divided the plane into:	A. Two similar regions B. Two disjoint regions C. Four equal parts D. One region
5	The solution set of the inequality $ax + by < c$ is	A. straight line B. half plane C. parabola D. none of these
6	$r + 3 > 5$ then which is true	A. $r + 2 \geq 4$ B. $r + 2 \leq 4$ C. $r + 2 = 4$ D. None
7	$x = 1$ is in the solution of the inequality	A. $x + 1 \geq 0$ B. $x - 2 \geq 0$ C. $3x - 1 \leq 0$ D. $x + 2 \leq 0$
8	$(0,1)$ is in the solution of the inequality	A. $3x + 2y \geq 8$ B. $2x - 3y \leq 4$ C. $2x + 3y \geq 5$ D. $x - 2y \leq -5$
9	$3x + 4 \geq 0$ is	A. equation B. inequality C. identity D. none of these
10	$3x + 4 > 0$ is	A. equation B. identity C. inequality D. none of these
11	The corner point of the boundary lines, $x - 2y = 2x + y = 2$ is:	A. $(2,6)$ B. $(6,2)$ C. $(-2,2)$ D. $(2,-2)$
12	A _____ divides the plane into left and right half planes.	A. Vertical line B. Horizontal line C. Non vertical line D. Inequality
13	Inequalities have _____ symbol	A. 2 B. 3 C. 4 D. 1
14	The point $(1,3)$ is one solution of	A. $3x + 5y \geq 29$ B. $3x + 5y \leq 7$ C. $x + 2y \leq 4$ D. $x + 4y \geq 3$
15	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

16	If $-1 < x < 0$, which of the following statements must be true?	<p>A. $x < x^2 < x^3$</p> <p>B. $x < x^3 < x^2$</p> <p>C. $x^2 < x^3 < x$</p> <p>D. $x^2 < x < x^3$</p>
17	$3x + 4 = 0$ is	<p>A. not inequality</p> <p>B. equation</p> <p>C. identity</p> <p>D. inequality</p>
18	$s > t$ then	<p>A. $(s - t)^2 > (t - s)^2$</p> <p>B. $(s - t)^2 < (t - s)^2$</p> <p>C. $(s - t)^2 = (t - s)^2$</p> <p>D. None</p>
19	Which is in the solution set of $4x - 3y < 2$	<p>A. (3, 0)</p> <p>B. (4, 1)</p> <p>C. (1, 3)</p> <p>D. None</p>
20	The real numbers which satisfy an inequality form its	<p>A. solution</p> <p>B. coefficient</p> <p>C. domain</p> <p>D. range</p>