

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

Sr	Questions	Answers Choice
1	For graphing a linear inequality, solid line is drawn if the inequality involves the symbols:	A. $>$ or $<$; B. $<u>>$ or $<u><$; C. $=$ or \neq D. $=$ or $>$;
2	Sum of two quantities is at least 20 is denoted by	A. $x + y = 20$ B. $x + y \geq 20$ C. $x + y \neq 20$ D. $x + y \leq 20$
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	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. $x - y \leq -6$ C. $x - y \geq -6$ D. None
5	$r + 3 > 5$ then which is true	A. $r + 2 \geq 4$ B. $r + 2 \leq 4$ C. $r + 2 = 4$ D. None
6	Which of the following is not a solution of system of inequalities $2x - 3y \leq 6, 2x + y \geq 2, x + 2y \leq 8, x \geq 0, y \geq 0$	A. $(1,0)$ B. $(0,4)$ C. $(3,0)$ D. $(8,0)$
7	The feasible region which can be enclosed within a circle is called	A. Bounded region B. Convex region C. Unbounded region D. None
8	A point (x,y) which satisfy a linear inequality in two variables form its	A. Solution B. Domain C. Range D. None
9	An expression involving any of the symbols $<, >, \leq$ or \geq is called	A. equation B. inequality C. linear equation D. identity
10	The liner equation $ax + by = c$ is called _____ of the inequality $ax + by > c$.	A. Associated equation B. Non-associated equation C. disjoint equation D. Feasible equation
11	The graph of $y < 2$ is the	A. Left half plane B. upper half plane C. Right half plane D. Lower half plane
12	Which is not a half plane	A. $ax + by \leq c$ B. $ax + by \geq c$ C. Both A and B D. None
13	The corner point of the boundary lines, $x - 2y$ $2x + y = 2$ is:	A. $(2,6)$ B. $(6,2)$ C. $(-2,2)$ D. $(2,-2)$
14	$ab > 0$ and $a > 0$ then	A. $a \geq b$ B. $a \leq b$ C. $a = b$ D. None
15	$x = 0$ is in the solution of the inequality	A. $x \geq 0$ B. $3x + 4 \leq 0$ C. $x + 3 \leq 0$ D. $x - 2 \leq 0$

16	$s > t$ then	A. $(s - t)^2 > (t - s)^2$ B. $(s - t)^2 < (t - s)^2$ C. $(s - t)^2 = (t - s)^2$ D. None
17	Order (or sense) of an inequality is changed by multiplying or dividing its each side by a:	A. Zero B. one C. negative constant D. Non negative constant
18	A point where two of its boundary lines intersect is called	A. Corner point B. Feasible point C. Vertex D. Feasible solution
19	The graph of linear equation $2x + 3y = 10$	A. Parabola B. Circle C. Hyperbola D. Straight line
20	$x = \underline{\hspace{2cm}}$ is in the solution of $2x - 3 < 0$	A. 2 B. -2 C. 3 D. 4