

ECAT Mathematics Chapter 21 Linear Inequalities and Linear Programming Online Test

Sr	Questions	Answers Choice
1	If $ab > 0$ and $a < 0$, which of the following is negative?	A. b B. $-b$ C. $-a$ D. $(a - b)^2$
2	If $x < y$, $2x = A$, and $2y = B$, then	A. $A = B$ B. $A < B$ C. $A < x$ D. $B < y$
3	The point _____ is in the solution of the inequality $2x - 3y < 4$	A. $(0, -2)$ B. $(1, -3)$ C. $(2, 2)$ D. $(3, 0)$
4	$(2, 1)$ is in the solution of the inequality	A. $2x + y > 7$ B. $x - y > 2$ C. $3x + 5y < 6$ D. $2x + y < 6$
5	The point _____ is in the solution of the inequality $4x - 3y < 2$	A. $(0, 1)$ B. $(2, 1)$ C. $(2, 2)$ D. $(3, 3)$
6	The point _____ is in the solution of the inequality $2x - 3y > 5$	A. $(1, -1)$ B. $(2, 2)$ C. $(0, 0)$ D. $(3, 0)$
7	The point _____ is in the solution of the inequality $2x + 3y < 5$	A. $(1, 1)$ B. $(2, 2)$ C. $(0, 1)$ D. $(0, 2)$
8	$(1, 2)$ is in the solution of the inequality	A. $2x + y > 8$ B. $2x + y < 6$ C. $2x - y > 1$ D. $2x + 3y < 2$
9	$(0, 0)$ is in the solution of the inequality	A. $x + y > 3$ B. $x - y > 2$ C. $3x + 2y > 5$ D. $3x - 2y < 2$
10	$(0, 1)$ is in the solution of the inequality	A. $3x + 2y > 8$ B. $2x - 3y < 4$ C. $2x + 3y > 5$ D. $x - 2y < -5$
11	$(1, 0)$ is in the solution of the inequality	A. $3x + 2y > 8$ B. $2x - 3y < 4$ C. $2x + 3y > 3$ D. $x - 2y < -5$
12	$(1, 1)$ is the in the solution of the inequality	A. $3x + 4y > 3$ B. $2x + 3y < 2$ C. $4x = 3y > 5$ D. $2c - 3y > 2$
13	The solution set of the inequality $ax + by < c$ is	A. straight line B. half plane C. parabola D. none of these
14	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
15	$x = \underline{\hspace{2cm}}$ is in the solution of $2x - 5 > 0$	A. 0 B. 2 C. -2 D. 3

16	$x = \underline{\hspace{2cm}}$ is in the solution of $2x - 3 < 0$	A. 2 B. -2 C. 3 D. 4
17	$x = \underline{\hspace{2cm}}$ is in the solution of $2x + 3 \geq 0$	A. 1 B. -2 C. -3 D. -4
18	$x = \underline{\hspace{2cm}}$ is in the solution of $2x + 3 < 0$	A. 0 B. 2 C. -1 D. -2
19	$x = -1$ is in the solution of the inequality	A. $x + 5 \leq 0$ B. $2x + 3 < 0$ C. $x \geq 0$ D. $2x + 3 \geq 0$
20	$x = 1$ is in the solution of the inequality	A. $x + 1 \geq 0$ B. $x - 2 \geq 0$ C. $3x - 1 \leq 0$ D. $x + 2 \leq 0$
21	$x = 0$ is in the solution of the inequality	A. $x \geq 0$ B. $3x + 4 \leq 0$ C. $x + 3 \leq 0$ D. $x - 2 \leq 0$
22	The real numbers which satisfy an inequality form its	A. solution B. coefficient C. domain D. range
23	$ax + by < c$ is linear inequality in	A. four variables B. three variables C. two variables D. one variable
24	$2x + 3y > 4$ is a linear inequality in	A. one variable B. two variables C. three variables D. none of these
25	An expression involving any of the symbols $<$, $>$, \leq or \geq is called	A. equation B. inequality C. linear equation D. identity
26	$3x + 4 = 0$ is	A. not inequality B. equation C. identity D. inequality
27	$3x + 4 \leq 0$ is	A. not inequality B. equation C. identity D. inequality
28	$3x + 4 < 0$ is	A. inequality B. equation C. identity D. not inequality
29	$3x + 4 \geq 0$ is	A. equation B. inequality C. identity D. none of these
30	$3x + 4 > 0$ is	A. equation B. identity C. inequality D. none of these