

ECAT Pre General Science Mathematics Chapter 21 Linear Inequalities and Linear Programming Online Test

1 The point (1,3) is one solution of C. 3.x + 5y > 29 8. 3x + 5y > 7 8. 3x + 5x + 5x + 7 8. 3x + 7 8.			
1 The point (1,3) is one solution of S. 3. x + 5y 8Lt 7 C. x + 4y 8gt; 3 2 Optimal solution is found by evaluation the objective function at A. All point of feasible regits S. Corner point D. None 3 A function which is to be maximized or minimized is called an B. Implicit function B. Implicit function B. Implicit function B. Implicit function D. None 4 Each point of the feasible region is called B. Seasible solution B. Seasible solution D. None 5 A point (x,y) which satisfy a linear inequality in two variables form its B. Domain C. Both a Samp; b D. None 6 A point where two of its boundary lines intersect is called B. Corner point D. None 7 Corner point of the system x - y ≤ 2,x + y ≤ 4,2x - y ≤ 6,x≥ 0,y≥ 0 8 (1,4) B. (4,2) C. (3,1) D. (4,1) 8 Which of the following is not a solution of system of inequalities 2x 3y ≤6,2x + y≥ 2,x + 2y ≤ 8, x + y≥ 20 C. (3,0) D. x + y≥ 20 9 Sum of two quantities is at least 20 is denoted by Sum of two quantities is at	Sr	Questions	Answers Choice
2 Optimal solution is found by evaluation the objective function at B. Corner point C. Origin D. None 3 A function which is to be maximized or minimized is called an A Explicit function B. Implicit function D. None 4 Each point of the feasible region is called A Solution B. feasible solution C. Both a & b D. None 5 A point (x,y) which satisfy a linear inequality in two variables form its A Solution B. Domain C. Range D. None 6 A point where two of its boundary lines intersect is called A corner point B. Feasible point C. Vertex D. Feasible solution 7 Corner point of the system x - y≤ 2, x + y≤ 4,2x -y≤ 6,≈ 0,y≥ 0 A (1.4) B. (4.2) C. (3.1) D. (4.1) 8 Which of the following is not a solution of system of inequalities 2x- 3y ≤6,2x +y≥ 2,x +2y≤ 8, x ≥ 0,y ≥ 0 9 Sum of two quantities is at least 20 is denoted by A 4 (1.0) B. (0.4) C. (3.0) D. (8.0) 10 Maximum value of z = 15x +20y subject to 3x+ 4y≤ 12,x,y≥ 0 is given by A 120 B. 100 C. 140	1	The point (1,3) is one solution of	B. 3x + 5y < 7 C. x + 2y < 4
3 A function which is to be maximized or minimized is called an B. Implicit function C. Objective function D. None 4 Each point of the feasible region is called A. Solution B. feasible solution C. Both a & b D. None 5 A point (x,y) which satisfy a linear inequality in two variables form its A. Solution B. Domain C. Range D. None 6 A point where two of its boundary lines intersect is called A. Corner point B. Feasible point C. Vertex D. Feasible solution 7 Corner point of the system x - y≤ 2,x + y≤ 4,2x - y≤ 6,x≥ 0,y≥ 0 A. (1,4) B. (4,2) C. (3,1) D. (4,1) 8 Which of the following is not a solution of system of inequalities 2x 3y ≤6,2x + y≥ 2,x + 2y≤ 8, 2. (3,3) D. (8,0) A. (1,0) B. (0,4) C. (3,0) D. (8,0) 9 Sum of two quantities is at least 20 is denoted by A. x + y = 20 B. x + y≥ 20 C. x + y≠ 20 D. x + y≤	2	Optimal solution is found by evaluation the objective function at	C. Origin
Each point of the feasible region is called B. feasible solution C. Both a & Amp; b D. None A point (x,y) which satisfy a linear inequality in two variables form its A corner point B. Domain C. Range D. None A point where two of its boundary lines intersect is called A point where two of its boundary lines intersect is called A corner point B. Feasible point C. Vertex D. Feasible solution Corner point of the system $x - y \le 2, x + y \le 4, 2x - y \le 6, x \ge 0, y \ge 0$ A (1,4) B. (4,2) C. (3,1) D. (4,1) Which of the following is not a solution of system of inequalities $2x - 3y \le 6, 2x + y \ge 2, x + 2y \le 8$, A. (1,0) B. (0,4) C. (3,0) D. (8,0) Sum of two quantities is at least 20 is denoted by A $x + y = 20$ B. $x + y \ge 20$ D. $x + y \ne 20$ D. $x + y \ge 20$ D. $x + y \ge$	3	A function which is to be maximized or minimized is called an	B. Implicit functionC. Objective function
5A point (x,y) which satisfy a linear inequality in two variables form itsB. Domain C. Range D. None6A point where two of its boundary lines intersect is calledA Corner point B. Feasible point C. Vertex D. Feasible solution7Corner point of the system $x - y \le 2, x + y \le 4, 2x - y \le 6, \ge 0, y \ge 0$ A. (1,4) B. (4,2) C. (3,1) D. (4,1)8Which of the following is not a solution of system of inequalities $2x - 3y \le 6, 2x + y \ge 2, x + 2y \le 8$, $2x + 2y \ge 8$, $2x$	4	Each point of the feasible region is called	B. feasible solution C. Both a & Dy b
A point where two of its boundary lines intersect is called A point where two of its boundary lines intersect is called C. Vertex D. Feasible solution A. (1,4) B. (4,2) C. (3,1) D. (4,1) Which of the following is not a solution of system of inequalities $2x - 3y \le 6, 2x + y \ge 2, x + 2y \le 8$, $x \ge 0, y \ge 0$ Sum of two quantities is at least 20 is denoted by A. $x \ge 0, y \ge 0$ A. $x \ge 0, y \ge 0$ Maximum value of $z = 15x + 20y$ subject to $3x + 4y \le 12, x, y \ge 0$ is given by A. 46 B. 60 C. 50 D. 70 The maximum value of $z = 3x + 4y$ subjected to the constrains $x + y \le 40, x + 2y \le 60, x \ge 0$ and $y \ge 0$ is	5	A point (x,y) which satisfy a linear inequality in two variables form its	B. Domain C. Range
Corner point of the system $x - y \le 2, x + y \le 4, 2x - y \le 6, x \ge 0, y \ge 0$ B. $(4,2)$ C. $(3,1)$ D. $(4,1)$ Which of the following is not a solution of system of inequalities $2x - 3y \le 6, 2x + y \ge 2, x + 2y \le 8$, $(2, 3, 0)$ C. $(3, 0)$ D. $(8, 0)$ Sum of two quantities is at least 20 is denoted by A. $(3, 0)$ C. $(3, 0)$ D. $(3, 0)$	6	A point where two of its boundary lines intersect is called	B. Feasible point C. Vertex
Which of the following is not a solution of system of inequalities $2x-3y \le 6, 2x+y \ge 2, x+2y \le 8$, $E. (0,4)$ $C. (3,0)$ $D. (8,0)$ Sum of two quantities is at least 20 is denoted by A. $x + y = 20$ $E. (0,4)$ $E. (0$	7	Corner point of the system $x - y \le 2, x + y \le 4, 2x - y \le 6, x \ge 0, y \ge 0$	B. (4,2) C. (3,1)
9 Sum of two quantities is at least 20 is denoted by $ \begin{array}{ll} B. & x+y\geq 20 \\ C. & x+y\neq 20 \\ D. & x+y\leq 20 \end{array} $ 10 Maximum value of $z=15x+20y$ subject to $3x+4y\leq 12, x, y\geq 0$ is given by $ \begin{array}{ll} A. & 46 \\ B. & 60 \\ C. & 50 \\ D. & 70 \end{array} $ 11 The maximum value of $Z=3x+4y$ subjected to the constrains $x+y\leq 40, x+2y\leq 60, x\geq 0$ and $y\geq 0$ is $ \begin{array}{ll} A. & 120 \\ B. & 100 \\ C. & 140 \end{array} $	8		B. (0,4) C. (3,0)
10 Maximum value of $z = 15x + 20y$ subject to $3x + 4y \le 12, x, y \ge 0$ is given by B. 60 C. 50 D. 70 The maximum value of $Z = 3x + 4y$ subjected to the constrains $x + y \le 40, x + 2y \le 60, x \ge 0$ and $X = 100$ C. 140	9	Sum of two quantities is at least 20 is denoted by	B. x +y≥ 20 C. x +y≠ 20
The maximum value of $Z = 3x + 4y$ subjected to the constrains $x + y \le 40, x + 2y \le 60, x \ge 0$ and $X \ge 0$ is $X \ge 0$ is $X \ge 0$.	10	Maximum value of z =15x +20y subject to 3x+ 4y≤ 12,x,y≥ 0 is given by	B. 60 C. 50
D. 160	11		B. 100
The feasible region which can be enclosed within a circle is called A. Bounded region B. Convex region C. Unbounded region D. None	12	The feasible region which can be enclosed within a circle is called	B. Convex region C. Unbounded region
A. Left half plane B. upper half plane C. Right half plane D. Lower half plane	13	The graph of y < 2 is the	B. upper half plane C. Right half plane