**ASSIGNMENT**

**CLASS XI LINEAR INEQUALITY**

Q1 The sum of two numbers is 9 and sum of their squares is .The numbers are : (a) 2,5 (b) 4,5

(c) 3,4 (d) 2,3.

Q2 If one root of the equation 3x2 -6kx + 8k = 0 is 4 ,the other root is : (a) 2 (b) -2 (c) 4 (d) 3

Q4 The number of real solutions of the equation x2 – 3IxI + 2 = 0 is: (a) 2 (b) 8 (c) 4 (d) 3

Q6. The value of k for which x2 - 4x + k = 0 has coincident roots, is: (a) 6 (b) -2 (c) 4 (d) 13.

Q7 The polynomial (x2 - x + 1) has;(a) One proper linear factor (b) Two proper linear factor

(c) No proper linear factor 4 (d) None of these.

Q8 The perimeter of a rectangle is 82 m and its area is 400m2 . The breadth of the rectangle is :(a) 2 (b) 5 (c) 4 (d) 3.

Q9 The distance between the points P ( x, 4 ) and Q ( 1, 7 ) is 5 units , then the value of x is :(a) 2 or 5 (b) 1 or -6

(c) 1or 4 (d) -3 or 5

|  |  |
| --- | --- |
| Q10 | Find the equation to the straight line passing through the point of intersection of the lines 5*x*– 6*y* – 1 = 0 and 3*x* + 2*y* + 5 = 0 and perpendicular to the line 3*x* – 5*y* + 11 = 0. |
|  | (a) 5*x* - 3*y* + 8 = 0(b) 5*x* + 3*y* + 8 = 0  (c) 5*x* -3*y* - 8 = 0(d) 5*x* + 3*y* + 8 = 0 |

Q11 The domain of the function f(x) = is

1. [0, (b) (-)

(c) [1, (d) (-]

Q12 f(xy) = f(x)f(y) is true for all

1. polynomial functions f , (b) trigometric functions f,

(c) exponential functions f , (d) logarithmic functions f

Q13 For each non zero real number x , let f(x) = then range of f is –

1. a null set (b) a set consisting of only one element

(c) a set consisting of two elements (d) a set consisting of infinitely many elements .

Q14 The function f(x) = is -

1. an even function (b) an odd function
2. periodic function (d) none of these

Q15 If cosec - cot = , where 0 , then what is value of cos ?

(a) 0 (b)

(c) (d)

Q16 If , then what value of 4 + 2 ?

(a) -1 (b) 1

(c) 0 (d) 2

Q17 If sin A = and cos B = where A and B are acute angles ,then what is the value of A+B?

(a) (b)

(c) (d) none of these Let A={x R:0<x<1}. Then , which of the following is not an element of A ?



(a) 1 (b) (c) (d)



19. Write down the modulus of : 2 +



(a) 1 (b) (c) 3 (d) 4

20. 2= ?



(a) (b) 2+ 11 (c) 8 – 3 (d) None of these



21. = ?



(a) 1 (b) -1 (c) (d)

22. X =?



(a) 12 (b) (c) -12 (d) None of these



23. The smallest integer n for which = 1



(a) 4 (b) 8 (c) 12 (d) 16

24. Range of the given function f(x)= 2-3x is

(a) (-,2) (b) (- ,2] (c) (2, ) (d) None of these

25. Let f = { (1,1) , (2,3) , (0 -1) , (-1, -3)} be a linear function from Z to Z. Then f(x) is

(a ) 2x-1 (b) 3x-2 (c) 5x+1 (d) None of these

Let A={x R:0<x<1}. Then , which of the following is not an element of A ?



(a) 1 (b) (c) (d)



19. Write down the modulus of : 2 +



(a) 1 (b) (c) 3 (d) 4

20. 2= ?



(a) (b) 2+ 11 (c) 8 – 3 (d) None of these



21. = ?



(a) 1 (b) -1 (c) (d)

22. X =?



(a) 12 (b) (c) -12 (d) None of these



23. The smallest integer n for which = 1



(a) 4 (b) 8 (c) 12 (d) 16

24. Range of the given function f(x)= 2-3x is

(a) (-,2) (b) (- ,2] (c) (2, ) (d) None of these

25. Let f = { (1,1) , (2,3) , (0 -1) , (-1, -3)} be a linear function from Z to Z. Then f(x) is

(a ) 2x-1 (b) 3x-2 (c) 5x+1 (d) None of these

Let A={x R:0<x<1}. Then , which of the following is not an element of A ?



(a) 1 (b) (c) (d)



19. Write down the modulus of : 2 +



(a) 1 (b) (c) 3 (d) 4

20. 2= ?



(a) (b) 2+ 11 (c) 8 – 3 (d) None of these



21. = ?



(a) 1 (b) -1 (c) (d)

22. X =?



(a) 12 (b) (c) -12 (d) None of these



23. The smallest integer n for which = 1



(a) 4 (b) 8 (c) 12 (d) 16

24. Range of the given function f(x)= 2-3x is

(a) (-,2) (b) (- ,2] (c) (2, ) (d) None of these

25. Let f = { (1,1) , (2,3) , (0 -1) , (-1, -3)} be a linear function from Z to Z. Then f(x) is

(a ) 2x-1 (b) 3x-2 (c) 5x+1 (d) None of these

Let A={x R:0<x<1}. Then , which of the following is not an element of A ?



(a) 1 (b) (c) (d)



19. Write down the modulus of : 2 +



(a) 1 (b) (c) 3 (d) 4

20. 2= ?



(a) (b) 2+ 11 (c) 8 – 3 (d) None of these



21. = ?



(a) 1 (b) -1 (c) (d)

22. X =?



(a) 12 (b) (c) -12 (d) None of these



23. The smallest integer n for which = 1



(a) 4 (b) 8 (c) 12 (d) 16

24. Range of the given function f(x)= 2-3x is

(a) (-,2) (b) (- ,2] (c) (2, ) (d) None of these

25. Let f = { (1,1) , (2,3) , (0 -1) , (-1, -3)} be a linear function from Z to Z. Then f(x) is

(a ) 2x-1 (b) 3x-2 (c) 5x+1 (d) None of these

Let A={x R:0<x<1}. Then , which of the following is not an element of A ?



(a) 1 (b) (c) (d)



19. Write down the modulus of : 2 +



(a) 1 (b) (c) 3 (d) 4

20. 2= ?



(a) (b) 2+ 11 (c) 8 – 3 (d) None of these



21. = ?



(a) 1 (b) -1 (c) (d)

22. X =?



(a) 12 (b) (c) -12 (d) None of these



23. The smallest integer n for which = 1



(a) 4 (b) 8 (c) 12 (d) 16

24. Range of the given function f(x)= 2-3x is

(a) (-,2) (b) (- ,2] (c) (2, ) (d) None of these

25. Let f = { (1,1) , (2,3) , (0 -1) , (-1, -3)} be a linear function from Z to Z. Then f(x) is

(a ) 2x-1 (b) 3x-2 (c) 5x+1 (d) None of these

Let A={x R:0<x<1}. Then , which of the following is not an element of A ?



(a) 1 (b) (c) (d)



19. Write down the modulus of : 2 +



(a) 1 (b) (c) 3 (d) 4

20. 2= ?



(a) (b) 2+ 11 (c) 8 – 3 (d) None of these



21. = ?



(a) 1 (b) -1 (c) (d)

22. X =?



(a) 12 (b) (c) -12 (d) None of these



23. The smallest integer n for which = 1



(a) 4 (b) 8 (c) 12 (d) 16

24. Range of the given function f(x)= 2-3x is

(a) (-,2) (b) (- ,2] (c) (2, ) (d) None of these

25. Let f = { (1,1) , (2,3) , (0 -1) , (-1, -3)} be a linear function from Z to Z. Then f(x) is

(a ) 2x-1 (b) 3x-2 (c) 5x+1 (d) None of these