

Linear Programming - Class XII

Related Questions with Solutions

Questions

Question: 01

The values of x which satisfies the inequalities simultaneously $-3 < 2x - 1 < 19$ and $-1 \leq \frac{2x+3}{5} \leq 3$ is

- A. [-4, 10)
- B. (-1, 6]
- C. [-1, 6)
- D. (-1, 6)

Solutions

Solution: 01

$-3 < 2x - 1 < 19 \Rightarrow -2 < 2x < 20 \Rightarrow -1 < x < 10$ [i]
and $-1 \leq \frac{2x+3}{5} \leq 3 \Rightarrow -5 \leq 2x+3 \leq 15$
 $\Rightarrow -8 \leq 2x \leq 12 \Rightarrow -4 \leq x \leq 6$ [ii]
From [i] and [ii], $-1 < x \leq 6$
 $\therefore x \in (-1, 6]$

Correct Options

Answer:01

Correct Options: B