

## Linear Programming - Class XII

### Related Questions with Solutions

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#### Questions

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##### Question: 01

If  $5(2x - 7) - 3(2x + 3) \leq 0$  and  $2x + 19 \leq 6x + 47$

- A.  $(11, \infty)$
- B.  $[-7, 11]$
- C.  $(-\infty, 7)$
- D.  $[7, 11)$

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#### Solutions

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##### Solution: 01

$$5(2x - 7) - 3(2x + 3) \leq 0 \Rightarrow 4x \leq 44$$

$$\Rightarrow x \leq 11 \quad \dots\dots\dots[i]$$

$$2x + 19 \leq 6x + 47 \Rightarrow -4x \leq 28 \Rightarrow x \geq -7 \quad \dots\dots\dots[ii]$$

$$[i], [ii] \Rightarrow x \in [-7, 11]$$

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#### Correct Options

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Answer:01

Correct Options: B