

## Linear Programming - Class XII

### Related Questions with Solutions

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#### Questions

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##### Question: 01

If:  $2(x - 6) < 3x - 7$ ,  $11 - 2x < 6(x - 2)$  then  $x \in$

- A.  $\left(\frac{23}{8}, \infty\right)$
- B.  $(-5, \infty)$
- C.  $\left(-5, \frac{23}{8}\right)$
- D.  $\left(-\infty, \frac{23}{8}\right)$

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#### Solutions

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##### Solution: 01

$$2(x - 6) < 3x - 7 \Rightarrow -x < 5 \Rightarrow x > -5 \dots\dots\dots[i]$$

$$11 - 2x < 6(x - 2) \Rightarrow -8x < -23 \Rightarrow x > \frac{23}{8} \dots\dots\dots[ii]$$

$$\text{From [i] \& [ii]} \Rightarrow x > \frac{23}{8}$$

$$\Rightarrow x \in \left(\frac{23}{8}, \infty\right)$$

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#### Correct Options

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Answer:01

Correct Options: A