

## Hyperbola - Class XI

### Related Questions with Solutions

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#### Questions

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##### Question: 01

A hyperbola passes through (2, 3) and has asymptotes  $3x - 4y + 5 = 0$  and  $12x + 5y - 40 = 0$ , then the equation of its transverse axis is

- A.  $77x - 21y - 265 = 0$
- B.  $21x - 77y + 265 = 0$
- C.  $21x - 77y - 265 = 0$
- D.  $21x + 77y - 265 = 0$

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#### Solutions

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##### Solution: 01

Transverse axis is the equation of the angle bisector passing containing point [2, 3], which is given by

$$\frac{3x - 4y + 5}{5} = \frac{12x + 5y - 40}{13}$$
$$\Rightarrow 21x + 77y = 265$$

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#### Correct Options

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Answer:01

Correct Options: D