

# Assignment-2

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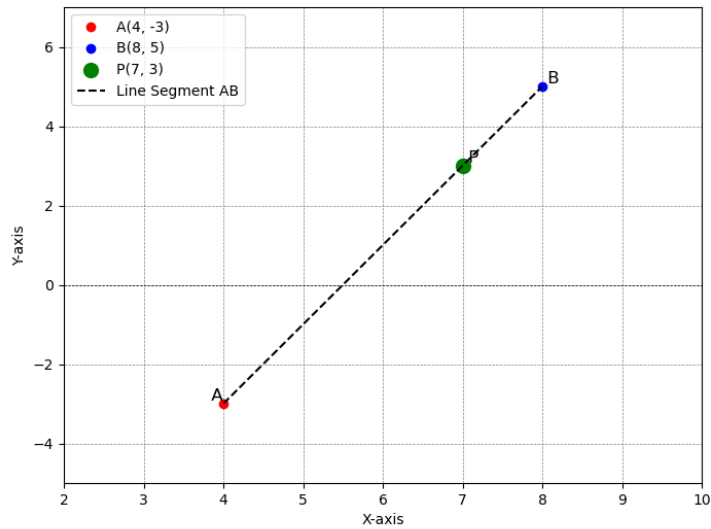
## I. INTERSECTION OF CONICS(CBSE)

Question: find the coordinates of the point which divides the line segment joining the points  $(4, -3)$  and  $(8, 5)$  in the ratio  $3 : 1$  internally

**Solution:**

using section formula, the desired point is

$$\frac{1}{3+1} \left( \begin{pmatrix} 4 \\ -3 \end{pmatrix} + 3 \begin{pmatrix} 8 \\ 5 \end{pmatrix} \right) = \begin{pmatrix} 7 \\ 3 \end{pmatrix} \quad (1)$$



Parameter	value
$A$	$(4, -3)$
$B$	$(8, 5)$
$P$	$(7, 3)$

Table 1

PARAMETERS USED