EE24BTECH11011-B.PRANAY KUMAR

Question:

Let A
$$\begin{pmatrix} 4 \\ 2 \end{pmatrix}$$
, B $\begin{pmatrix} 6 \\ 5 \end{pmatrix}$, C $\begin{pmatrix} 1 \\ 4 \end{pmatrix}$ be the vertices of $\triangle ABC$.

The median from A meets BC at D. Find the coordinates of the point D.

Solution::

Using section formula, the mid point of BC is

$$\mathbf{D} = \frac{\mathbf{B} + \mathbf{C}}{2} \tag{0.1}$$

(0.2)

$$\mathbf{D} = \begin{pmatrix} \frac{7}{2} \\ \frac{6}{2} \end{pmatrix} \tag{0.3}$$

Therefore $\begin{pmatrix} \frac{7}{2} \\ \frac{9}{2} \end{pmatrix}$ are the required coordinates of D.

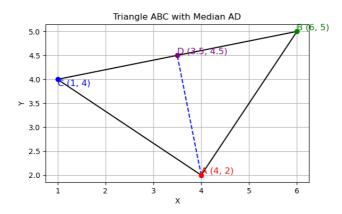


Fig. 0.1: Median of triangle