

3.2.13

AI25BTECH11002 - Ayush Sunil Labhade

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Question:

Draw a triangle ABC in which $AB=5\text{cm}$, $BC=6\text{cm}$ and $\angle ABC = 60^\circ$.

Solution:

The triangle can be plotted by taking $B = (0, 0)$ and $A = (5, 0)$.

Therefore, C will be:

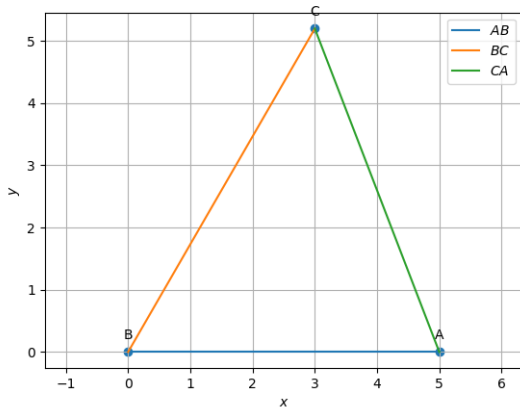
$$C = (6 \cos 60^\circ, 6 \sin 60^\circ)$$

Thus, the points are:

Point	Vector
A	$\begin{pmatrix} 5 \\ 0 \end{pmatrix}$
B	$\begin{pmatrix} 0 \\ 0 \end{pmatrix}$
C	$\begin{pmatrix} 6 \cos(60^\circ) \\ 6 \sin(60^\circ) \end{pmatrix}$

Table: Points data

Graph:



Figure