Assignment 1

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Download all python codes from

https://github.com/ooharapolu/ASSIGNMNT/Assignment1.py

and latex-tikz codes from

https://github.com/ooharapolu/ASSIGNMNT/main.tex

1 Question No.2.11

Draw an equilateral triangle of side 5.5

2 SOLUTION:

Let,

$$\mathbf{A} = a\begin{pmatrix}\cos\theta\\ \sin\theta\end{pmatrix}, \mathbf{B} = \begin{pmatrix}0\\0\end{pmatrix}, \mathbf{C} = \begin{pmatrix}a\\0\end{pmatrix} \tag{2.0.1}$$

here,$\theta = 60^\circ$ and $a = 5.5$
so, coordinates of A,B and C are

$$\mathbf{A} = 5.5\begin{pmatrix}\cos 60^\circ\\ \sin 60^\circ\end{pmatrix}, \mathbf{B} = \begin{pmatrix}0\\0\end{pmatrix}, \mathbf{C} = \begin{pmatrix}5.5\\0\end{pmatrix} \tag{2.0.2}$$

Now, $\triangle ABC$ can be plotted using vertices AB ,BC and CA .
Plot the $\triangle ABC$:

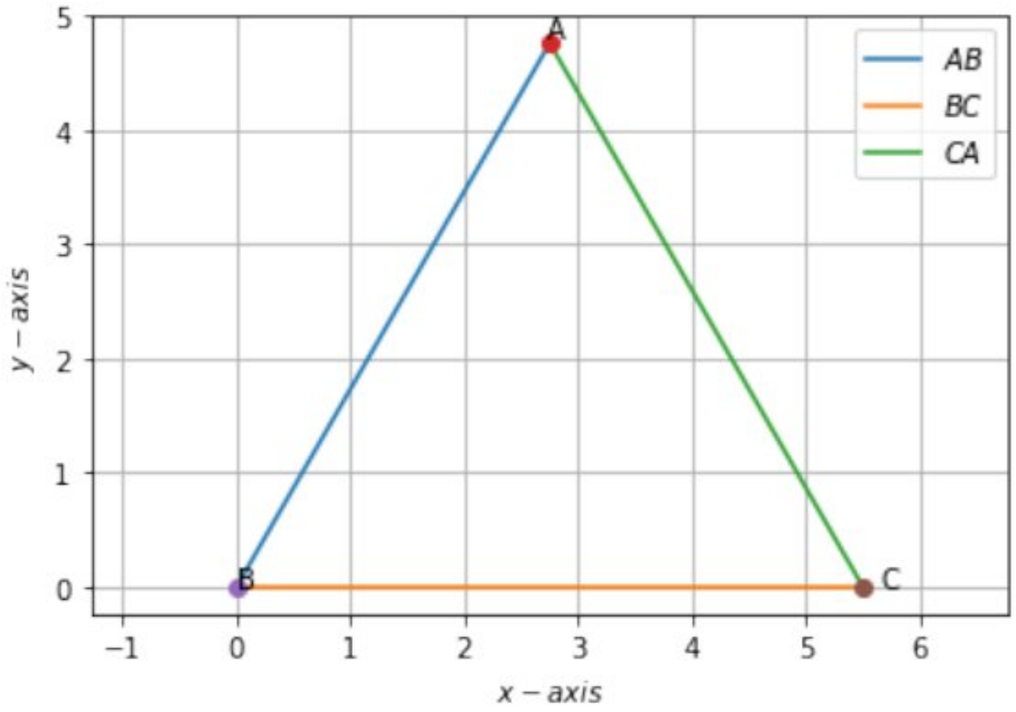

Fig. 2.1: $\triangle ABC$