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,

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

Here,$\theta = 60°$ and $a = 5.5$. So, Coordinates of A,B and C are

$$\mathbf{A} = 5.5\begin{pmatrix} \cos 60° \\ \sin 60° \end{pmatrix}, \mathbf{B} = \begin{pmatrix} 0 \\ 0 \end{pmatrix}, \mathbf{C} = \begin{pmatrix} 5.5 \\ 0 \end{pmatrix} \qquad (2.0.2)$$
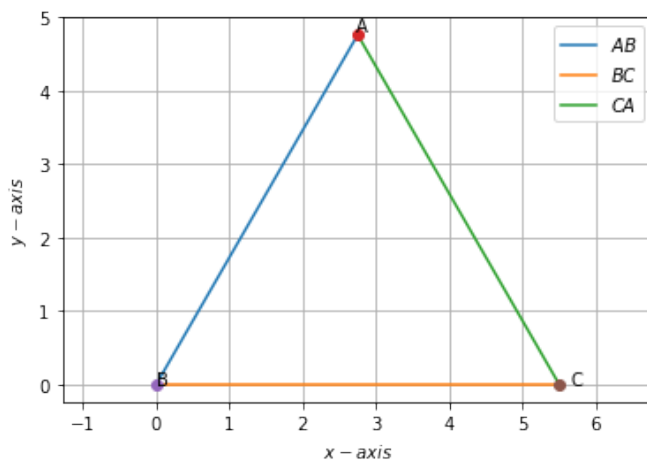
Now, $\triangle ABC$ can be plotted using vertices AB ,BC and CA Plot the $\triangle ABC$:

Fig. 2.1: $\triangle ABC$