AI24BTECH11031 - Shivram S

Ouestion:

Write the steps of construction for drawing a $\triangle ABC$ in which BC = 8cm, $\angle B = 45^{\circ}$ and $\angle C = 30^{\circ}$.

Solution:

- 1) Draw a line segment BC of length 8cm using a ruler.
- 2) At point B construct $\angle XBC$ of measure 45°.
- 3) At point C construct $\angle YCB$ of measure 30°
- 4) Extend BX and CY and label their point of intersection as A. $\triangle ABC$ is the required triangle.

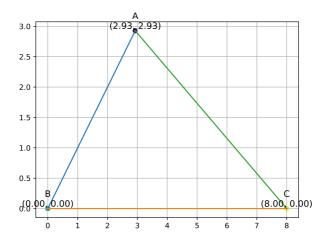


Fig. 4.1: Triangle ABC where BC = 8cm, $\angle B = 45^{\circ}$ and $\angle C = 30^{\circ}$