



Constructions Ex 17.4 Q4

**Answer :**

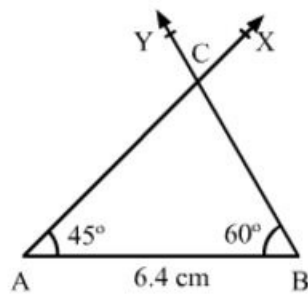
Steps of construction:

Draw a line segment  $AB = 6.4$  cm.

Draw  $\angle BAX = 45^\circ$ .

Draw  $\angle ABY$  with  $Y$  on the same side of  $AB$  as  $X$  such that  $\angle ABY = 60^\circ$ .

Let  $AX$  and  $BY$  intersect at  $C$ ;  $ABC$  is the required triangle.



Constructions Ex 17.4 Q5

**Answer :**

We can see that  $\angle A + \angle B + \angle C = 180^\circ$ . Therefore  $\angle C = 180^\circ - 60^\circ - 90^\circ = 30^\circ$ .

Steps of construction:

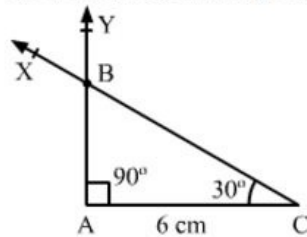
Draw a line segment  $AC = 6$  cm.

Draw  $\angle ACX = 30^\circ$ .

Draw  $\angle CAY$  with  $Y$  on the same side of  $AC$  as  $X$  such that  $\angle CAY = 90^\circ$ .

Join  $CX$  and  $AY$ . Let these intersect at  $B$ .

$ABC$  is the required triangle where angle  $\angle ABC = 60^\circ$ .



\*\*\*\*\* END \*\*\*\*\*