



Constructions Ex 17.5 Q1

Answer :

Steps of construction:

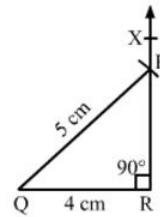
Draw a line segment $QR = 4$ cm.

Draw $\angle QRX$ of measure 90° .

With centre Q and radius $PQ = 5$ cm, draw an arc of the circle to intersect ray RX at P .

Join PQ to obtain the desired triangle PQR .

PQR is the required triangle.



Constructions Ex 17.5 Q2

Answer :

Steps of construction:

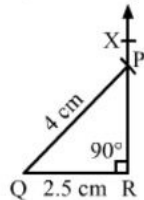
Draw a line segment $QR = 2.5$ cm.

Draw $\angle QRX$ of measure 90° .

With centre Q and radius $PQ = 4$ cm, draw an arc of the circle to intersect ray RX at P .

Join PQ to obtain the desired triangle PQR .

PQR is the required triangle.



Constructions Ex 17.5 Q3

Answer :

Let ABC be the right triangle at A such that hypotenuse $BC = 5.4$ cm. Let $\angle C = 30^\circ$.

Therefore $\angle A + \angle B + \angle C = 180^\circ$

$$\angle B = 180 - 30 - 90 = 60^\circ$$

Steps of construction:

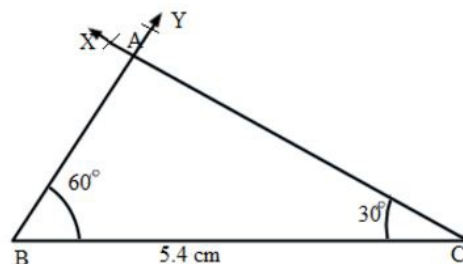
Draw a line segment $BC = 5.4$ cm.

Draw angle $CBY = 60^\circ$.

Draw angle BCX of measure 30° with X on the same side of BC as Y .

Let BY and CX intersect at A .

Then ABC is the required triangle.



***** END *****

