Chapter – 10
Practical Geometry
Exercise 10.5

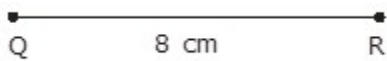**1.** Construct the right-angled ΔPQR, where m ∠Q = 90⁰, QR = 8cm and PR = 10cm.
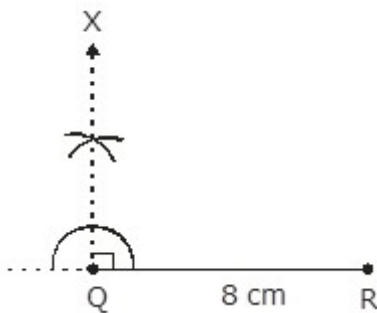
Answer:

Here,

According to the question,

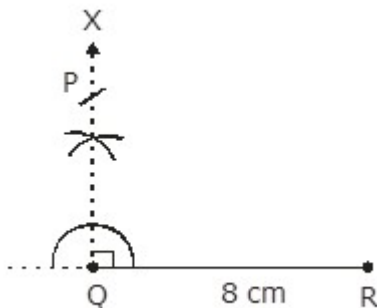We have to draw figure using following steps of construction:

Step 1: Draw a line segment QR of 8 cm

Step 2: Now, From Q construct a ray QX making an angle of 90° with QR.
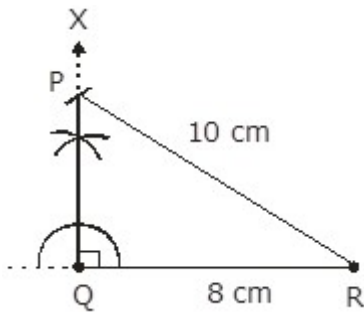

Step 3: Take R as a center and radius of 10 cm draw an arc intersecting QX at P

Step 4: Now, join RP

Hence, ΔPQR is the required triangle.

2. Construct a right-angled triangle whose hypotenuse is 6 cm long and one of the les is 4 cm long.
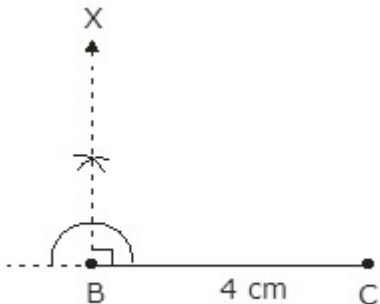
Answer:

Here,

According to the question,

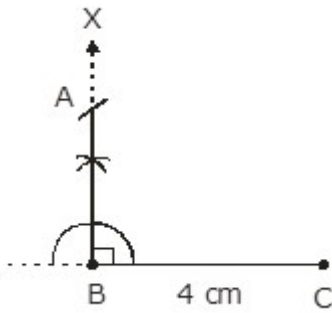We have to draw figure using following steps of construction:

Step 1: Draw a line segment BC of 4 cm

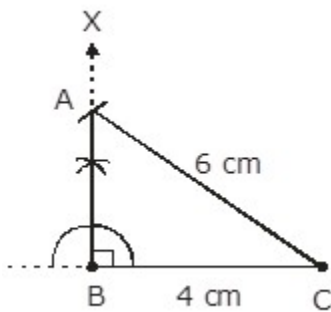Step 2: Now, From B construct a ray BX making an angle of 90° with BC.

Step 3: Take C as a center and radius of 6cm draw an arc intersecting BX at A

Step 4: Now, join AC

Hence, ΔABC is the required triangle.

3. Construct an/isosceles right-angled triangle ABC, where m ∠ACB = 90° and AC = 6cm.
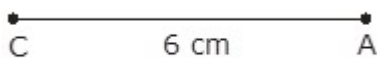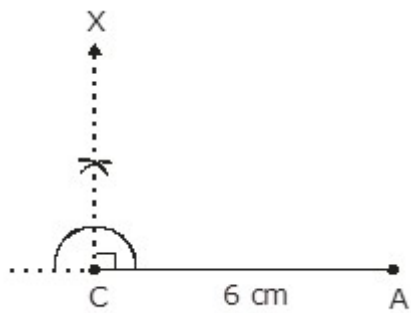
Answer:

Here,

According to the question,

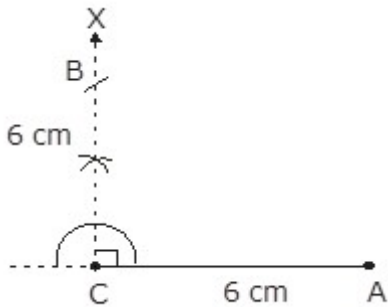We have to draw figure using following steps of construction:

Step 1: Draw a line segment AC of 6cm

Step 2: Now, From C construct a ray CX making an angle of 90° with AC.

Step 3: Take C as a centre and radius of 6cm draw an arc intersecting CX at B

Step 4: Now, join AB

Hence, ΔABC is the required triangle.