Exercise 17B

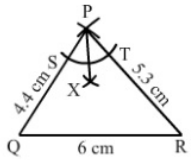
Q2

Answer :

Steps of construction:

1. Draw a line segment QR of length 6 cm.
2. Draw arcs of 4.4 cm and 5.3 cm from Q and R, respectively. They intersect at P.
3. Draw an arc of any radius from the centre (P), cutting PQ and PR at S and T, respectively.
4. With S as the centre and the radius more than half of ST, draw an arc .
5. With T as the centre and the same radius, draw another arc cutting the previously drawn arc at X.
6. Join P and X.

Then, PX is the bisector of ∠P.



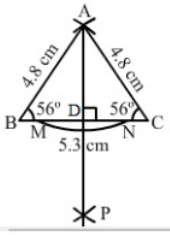
Q4

Answer :

Steps of construction:

1. Draw BC=5.3 cm
2. Draw an arc of radius 4.8 cm from the centre, B.
3. Draw another arc of radius 4.8 cm from the centre, C.
4. Both of these arcs intersect at A.
5. Join AB and AC.
6. With A as the centre and any radius, draw an arc cutting BC at M and N.
7. With M as the centre and the radius more than half of MN, draw an arc.
8. With N as the centre and the same radius, draw another arc cutting the previously drawn
9. Join AP, cutting BC at D.

Then, AD ⊥ *BC*



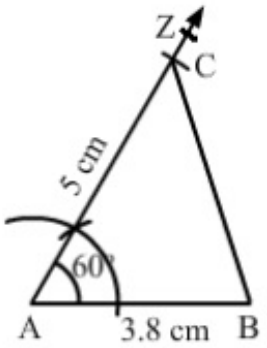
Q5

Answer :

Steps of construction:

1. Draw AB of length 3.8 cm.
2. Draw $\angle BAZ = 60^\circ$
3. With the centre as A, cut ray AZ at 5 cm at C.
4 Join BC.

Then, ABC is the required triangle.



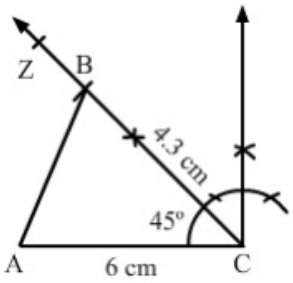
Q6

Answer :

Steps of construction:

1. Draw AC= 6 cm
2. Draw $\angle ACZ = 45^\circ$
3. With C as the centre, cut ray BZ at 4.3 cm at point B.
4. Join AB.

Then, ABC is the required triangle.



Q7

Answer :

Steps of construction:

1. Draw AB=5.2 cm
2. Draw $\angle BAX = 120^\circ$
3. With A as the centre, cut the ray AX at 5.3 cm at point C.
4. Join BC.
5. With A as the centre and any radius, draw an arc cutting BC at M and N.
6. With M as the centre and the radius more than half of MN, draw an arc.
7. With N as the centre and the same radius as before, draw another arc cutting the previously drawn arc at P.

8. Join AP meeting BC at D.

$\therefore$ AD $\perp$ BC

********** END **********