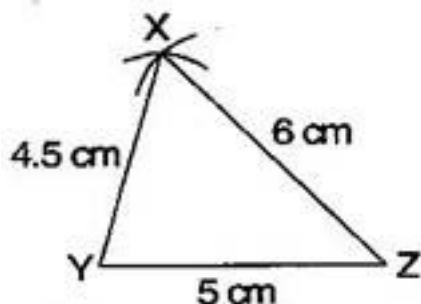


CBSE Class –VII Mathematics
NCERT Solutions
Chapter 10 Practical Geometry (Ex. 10.2)

Question 1. Construct $\triangle XYZ$ in which $XY = 4.5$ cm, $YZ = 5$ cm and $ZX = 6$ cm.

Answer: To construct: $\triangle XYZ$, where $XY = 4.5$ cm, $YZ = 5$ cm and $ZX = 6$ cm.



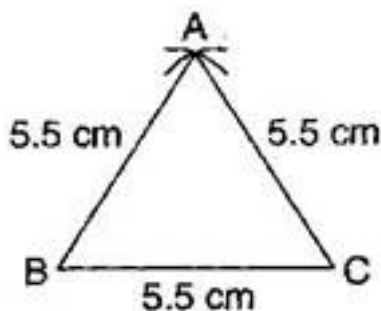
Steps of construction:

- (a) Draw a line segment $YZ = 5$ cm.
- (b) Taking Z as centre and radius 6 cm, draw an arc.
- (c) Similarly, taking Y as centre and radius 4.5 cm, draw another arc which intersects first arc at point X .
- (d) Join XY and XZ .

It is the required $\triangle XYZ$.

Question 2. Construct an equilateral triangle of side 5.5 cm.

Answer: To construct: A $\triangle ABC$ where $AB = BC = CA = 5.5$ cm



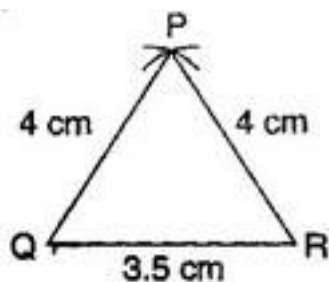
Steps of construction:

- (a) Draw a line segment $BC = 5.5$ cm
- (b) Taking points B and C as centers and radius 5.5 cm, draw arcs which intersect at point A.
- (c) Join AB and AC.

It is the required $\triangle ABC$.

Question 3. Draw $\triangle PQR$ with $PQ = 4$ cm, $QR = 3.5$ cm and $PR = 4$ cm. What type of triangle is this?

Answer: To construction: $\triangle PQR$, in which $PQ = 4$ cm, $QR = 3.5$ cm and $PR = 4$ cm.



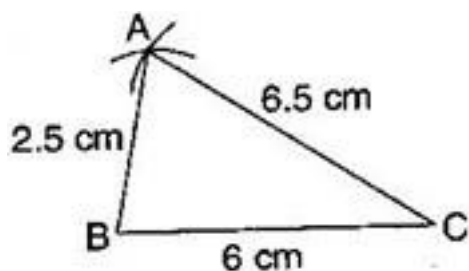
Steps of construction:

- (a) Draw a line segment $QR = 3.5$ cm.
- (b) Taking Q as centre and radius 4 cm, draw an arc.
- (c) Similarly, taking R as centre and radius 4 cm, draw an another arc which intersects first arc at P.
- (d) Join PQ and PR.

It is the required isosceles $\triangle PQR$.

Question 4. Construct $\triangle ABC$ such that $AB = 2.5$ cm, $BC = 6$ cm and $AC = 6.5$ cm. Measure $\angle B$.

Answer: To construct : $\triangle ABC$ in which $AB = 2.5$ cm, $BC = 6$ cm and $AC = 6.5$ cm.



Steps of construction:

- (a) Draw a line segment $BC = 6 \text{ cm}$.
- (b) Taking B as centre and radius 2.5 cm, draw an arc.
- (c) Similarly, taking C as centre and radius 6.5 cm, draw another arc which intersects first arc at point A.
- (d) Join AB and AC.
- (e) Measure angle B with the help of protractor.

It is the required $\triangle ABC$ where $\angle B = 80^\circ$.