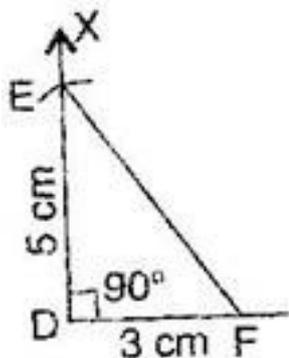


CBSE Class –VII Mathematics
NCERT Solutions
Chapter 10 Practical Geometry (Ex. 10.3)

Question 1. Construct $\triangle DEF$ such that $DE = 5$ cm, $DF = 3$ cm and $m\angle EDF = 90^\circ$.

Answer: To construct: $\triangle DEF$ where $DE = 5$ cm, $DF = 3$ cm and $m\angle EDF = 90^\circ$.



Steps of construction:

- (a) Draw a line segment $DF = 3$ cm.
- (b) At point D, draw an angle of 90° with the help of compass i.e., $\angle XDF = 90^\circ$.
- (c) Taking D as centre, draw an arc of radius 5 cm, which cuts DX at the point E.
- (d) Join EF.

It is the required right angled triangle DEF.

Question 2. Construct an isosceles triangle in which the lengths of each of its equal sides is 6.5 cm and the angle between them is 110° .

Answer: To construct: An isosceles triangle PQR where $PQ = RQ = 6.5$ cm and $\angle Q = 110^\circ$.

Steps of construction:

- (a) Draw a line segment $QR = 6.5$ cm.
- (b) At point Q, draw an angle of 110° with the help of protractor, i.e., $\angle PQR = 110^\circ$.

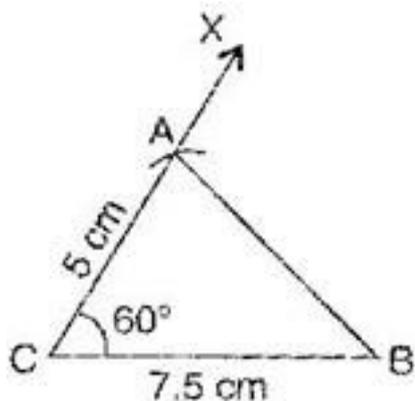
(d) Taking Q as centre, draw an arc with radius 1cm, which cuts QY at point P. 110°

(e) Join PR

It is the required isosceles triangle PQR.

Question 3. Construct $\triangle ABC$ with $BC = 7.5$ cm, $AC = 5$ cm and $m\angle C = 60^\circ$.

Answer: To construct: $\triangle ABC$ where $BC = 7.5$ cm, $AC = 5$ cm and $m\angle C = 60^\circ$.



Steps of construction:

(a) Draw a line segment $BC = 7.5$ cm.

(b) At point C, draw an angle of 60° with the help of protractor, i.e., $\angle XCB = 60^\circ$.

(c) Taking C as centre and radius 5 cm, draw an arc, which cuts XC at the point A.

(d) Join AB

It is the required triangle ABC.