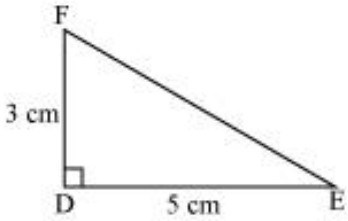
NCERT Solutions For Class 7 Maths Practical Geometry Exercise 10.3

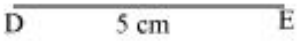
Q1. Construct ΔDEF such that DE = 5 cm, DF = 3 cm and m∠ EDF = 90°.

Ans: The rough sketch of the required ΔDEF is as follows.

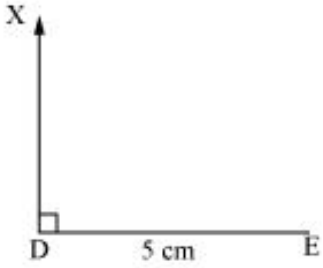


The steps of construction are as follows.

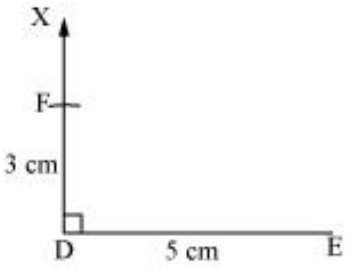
(i) Draw a line segment DE of length 5 cm.



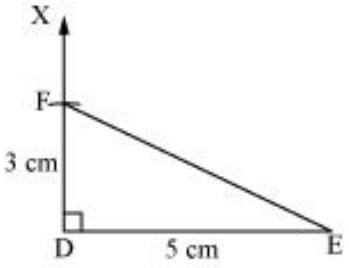
(ii) At point D, draw a ray DX making an angle of 90° with DE.



(iii) Taking D as centre, draw an arc of 3 cm radius. It will intersect DX at point F.

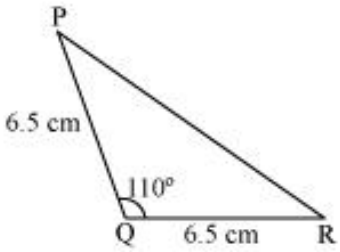


(iv) Join F to E. ΔDEF is the required triangle.



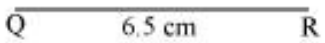
Q2. Construct an isosceles triangle in which the lengths of each of its equal sides is 6.5 cm and the angle between them is 110°.

Ans: An isosceles triangle PQR has to be constructed with PQ = QR = 6.5 cm. A rough sketch of the required triangle can be drawn as follows.

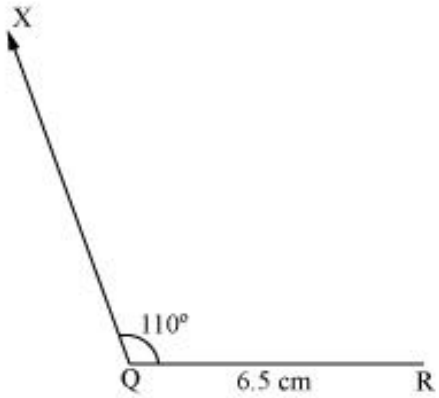


The steps of construction are as follows.

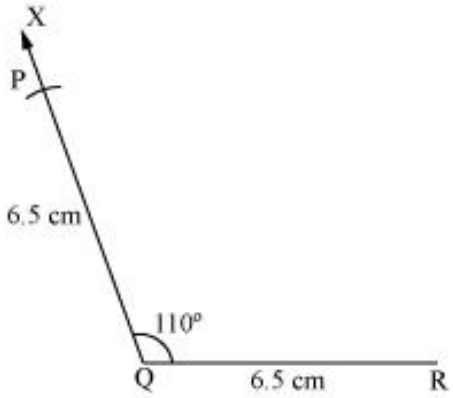
(i) Draw the line segment QR of length 6.5 cm.



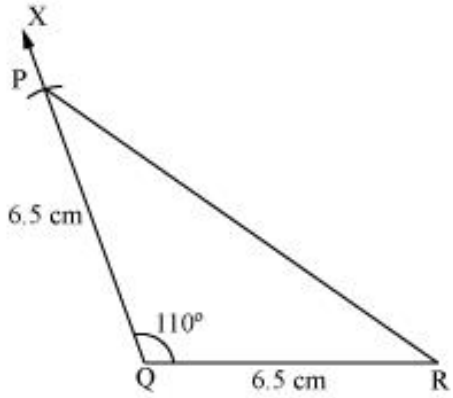
(ii) At point Q, draw a ray QX making an angle 110° with QR.



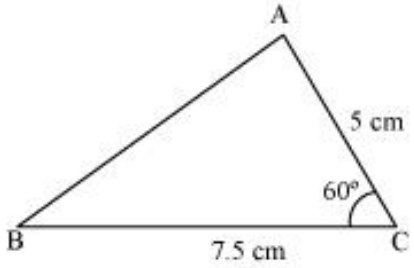
(iii) Taking Q as centre, draw an arc of 6.5 cm radius. It intersects QX at point P.



(iv) Join P to R to obtain the required triangle PQR.

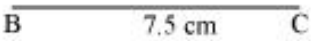


Q3. Construct ΔABC with BC = 7.5 cm, AC = 5 cm and m $\angle$ C = 60°.
Ans: A rough sketch of the required triangle is as follows.

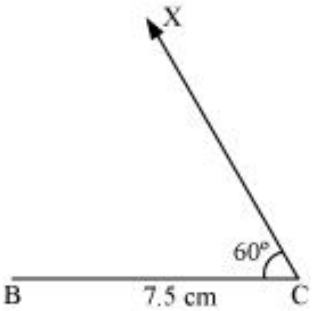


The steps of construction are as follows.

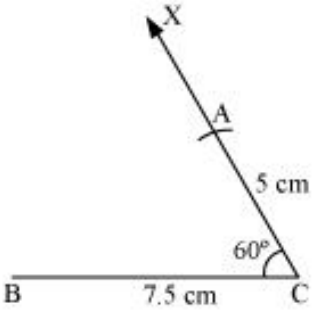
(i) Draw a line segment BC of length 7.5 cm.



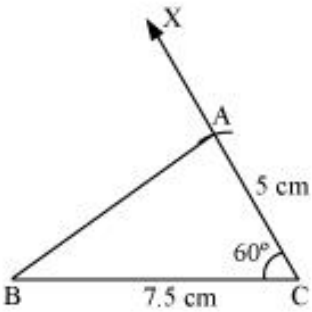
(ii) At point C, draw a ray CX making 60° with BC.



(iii) Taking C as centre, draw an arc of 5 cm radius. It intersects CX at point A.



(iv) Join A to B to obtain triangle ABC.



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