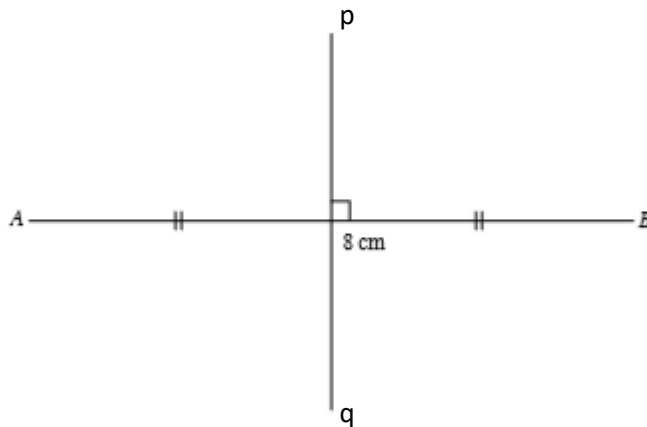


## ANSWER WORKSHEET 5

1.



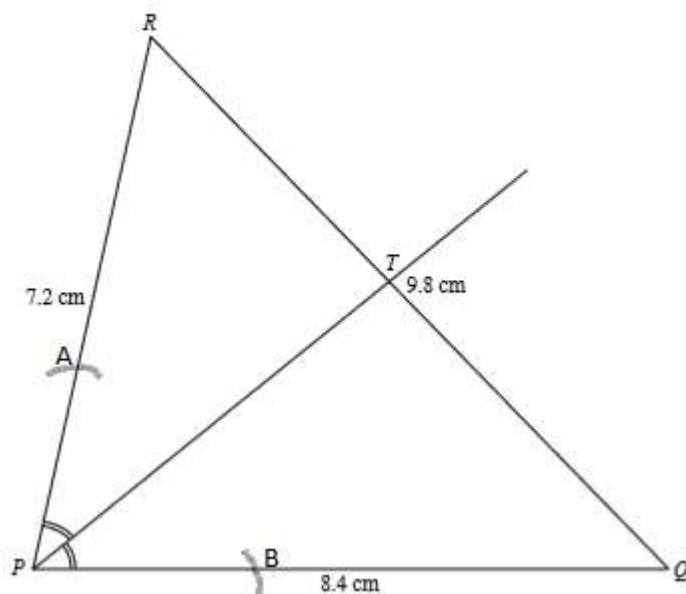
**Steps:** (i) Draw a line of length  $8\text{ cm}$  using a ruler and name it as  $AB$ .

(ii) Using  $A$  as centre and taking any radius (but more than half of the original length i.e.; more than  $4\text{ cm}$ ) draw an arc on top and bottom of the line  $AB$ .

(iii) Using  $B$  as centre and any radius (more than  $4\text{ cm}$ ) cut the previously drawn 2 arcs on top and bottom and name it as  $p$  and  $q$  respectively.

(iv) Join  $p$  and  $q$ . And  $pq$  is the required perpendicular bisector of the line  $AB$ .

2.



### CONSTRUCTION OF $\triangle PQR$

**Steps:** (i) Draw a line  $PQ = 8.4\text{cm}$  using a ruler.

(ii) As  $QR = 9.8\text{cm}$ , using compass with  $Q$  as centre and  $9.8\text{cm}$  as radius, draw an arc 1.

(iii) As  $PR = 7.2\text{cm}$ , using compass with  $P$  as centre and  $7.2\text{cm}$  as radius, cut the previously drawn arc and name the point as  $R$ .

(iv) Join  $PR$  and  $QR$ . The required triangle  $PQR$  is constructed.

(v) Using protractor, measure  $\angle P = 77^\circ$ .

### CONSTRUCTION OF ANGLE BISECTOR OF $P$

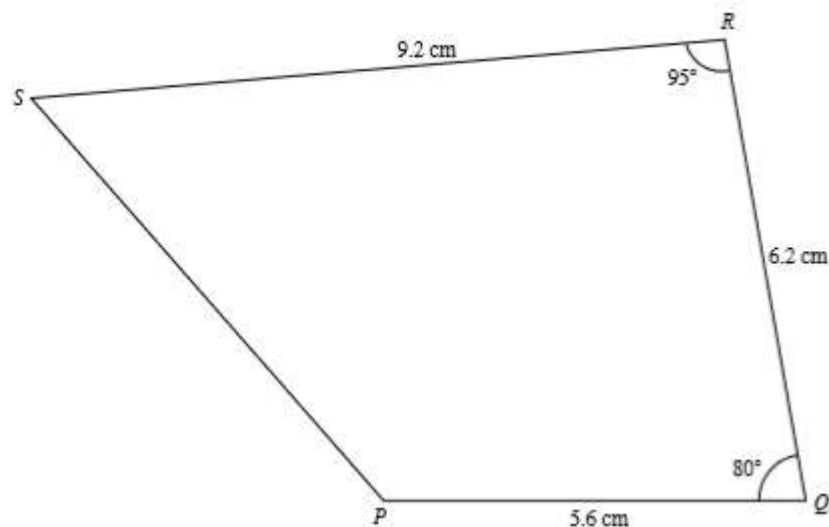
**Steps:** (i) With  $P$  as centre and with a suitable fixed radius, draw two arcs on  $PQ$  and  $PR$  and mark it as 'A' and 'B' respectively.

(ii) With  $A$  as centre and with a suitable radius, draw an arc 1.

(iii) With  $B$  as centre and the same radius used above, cut the previously drawn arc 1 and mark the point of intersection as  $T$ .

(iv) Join  $P$  and  $T$ . The required angle bisector  $PT$  is constructed.

**3.**



**Steps:** (i) Draw a line PQ of length 5.6cm using a ruler.

(ii) As  $\angle Q = 80^\circ$ , using a protractor draw an angle from Q. Since QR = 6.2cm, using compass from Q and with 6.2cm as radius, draw an arc on the angle and mark the point as R.

(iii) As  $\angle R = 95^\circ$ , using a protractor draw an angle from R. Since RS = 9.2cm, using compass from R and with 9.2cm as radius, draw an arc on the angle and mark the point as S.

(iv) Join PS. The required quadrilateral PQRS is constructed.

(v) Using ruler, measured the length of PS and **PS = 7cm**.

(vi) Using protractor, measured the  $\angle PSR$  and  **$\angle PSR = 54^\circ$** .