NCERT SOLUTIONS CLASS-8 MATHS CHAPTER-4 EXERCISE-4.5

Question 1:

Draw the quadrilateral according to the given information.

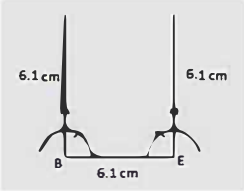
Draw the square BEST with the length 6.1 cm.

Answer:

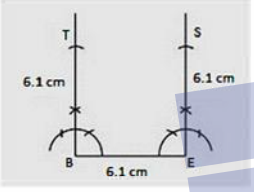
BE = 6.1 cm

Steps to construct the square

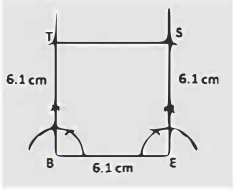
(i) Draw BE = 6.1 cm. Construct an angle of 90° at point E and at point B.



(ii) Vertex T and S are 6.1 cm away from point B and E respectively. Therefore cut the line segments SE and BT of 6.1 cm.



(iii) Join T to S.



Thus we get the required square BEST.

Question 2:

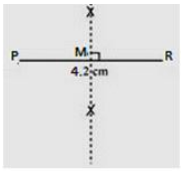
Draw the rhombus according to the given information.

Measurements of the diagonals are 4.2 cm and 5.4 cm long.

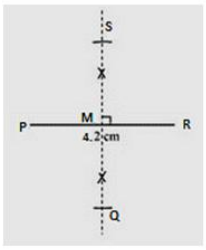
Answer:

In any rhombus, diagonals are perpendicular to each other.

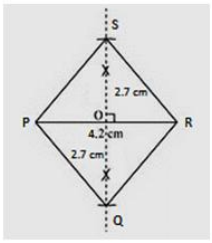
(i) Draw a line segment PR of 4.2 cm and draw a perpendicular bisector of PR. Let the point of intersection be M.



(ii) Draw arcs of $\frac{5.4}{2}$ = 2.7 cm on both the sides of the perpendicular bisector. Let the point of intersection of arcs and perpendicular bisector as S and Q.



(iii) Join points S and Q with points P and R.



Thus we get the required rhombus PQRS.

Question 3:

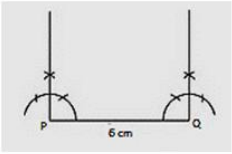
Draw the rectangle according to the given information.

Measurements of the adjacent sides are 6 cm and 3 cm long.

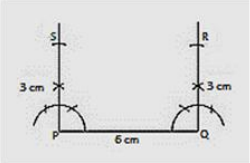
Answer:

In rectangle, opposite sides have same lengths and measure of all the interior angles is 90°.

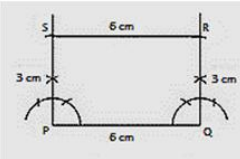
(i) Draw line – segment PQ of 6 cm and draw an angle of 90° at point P and Q.



(ii) Vertices R and S are 3 cm away from point Q and P respectively. Thus, arcs cut the line – segments PS and QR, 3 cm away.



(iii) Join S to R.



Question 4:

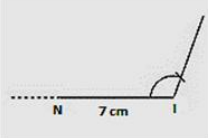
Draw the parallelogram NICE according to the given information.

Measure of NI = 7 cm and IC = 4.5 cm long.

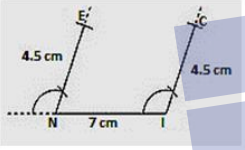
Answer:

In parallelogram, opposite sides have same length and they are parallel to each other.

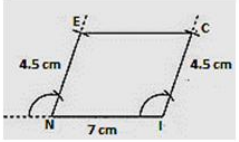
(i) Draw a line – segment NI of 7 cm and a ray at point I at any angle.



(ii) Draw a ray from point O which is parallel to the ray at I. The vertices E and C are 4.5 cm away from vertices N and I respectively. Cut the line – segments IC and NE of 4.5 cm.



(iii) Join E to C.



Thus this is the required parallelogram NICE.