Class:-8

Subject :- MATHS

Chapter:- (4)

(Practical Geometry)

Exercise 4.2

Question:- (1)

Construct the following quadrilaterals:

(i) Quadrilateral LIFT

LI = 4 cm, IF = 3 cm, TL = 2.5 cm, LF = 4.5 cm, IT = 4 cm

(ii) Quadrilateral GOLD

OL = 7.5 cm, GL = 6 cm, GD = 6 cm, LD = 5 cm, OD = 10 cm

(iii) Rhombus BEND

BN = 5.6 cm, DE = 6.5 cm

(i) **Given:** LI = 4 cm, IF = 3 cm, TL = 2.5 cm, LF = 4.5 cm, IT = 4 cm

To construct: A quadrilateral LIFT

Steps of construction:

(a) Draw a line segment LI = 4 cm.

(b) Taking radius 4.5 cm, draw an arc taking L as centre.

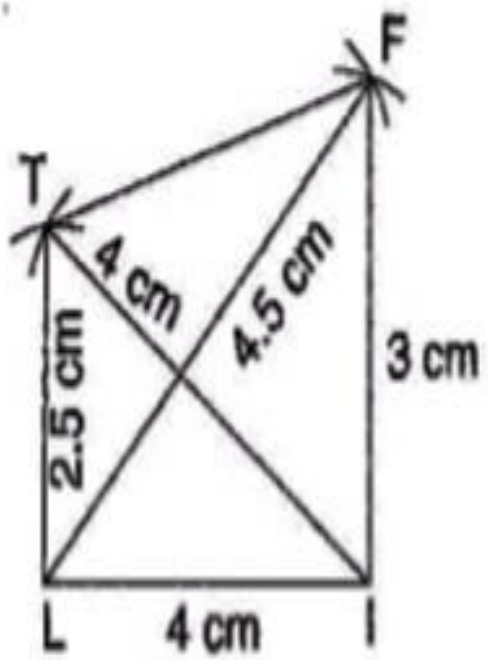
(c) Draw an arc of 3 cm taking I as centre which intersects the first arc at F.

(d) Join FI and FL.

(e) Draw another arc of radius 2.5 cm taking L as centre and 4 cm taking I as centre which intersect at T.

(f) Join TF, TI and TI.

It is the required quadrilateral LIFT.



(ii) **Given:** OL = 7.5 cm, GL = 6 cm, GD = 6 cm, LD = 5 cm, OD = 10 cm

To construct: A quadrilateral GOLD

Steps of construction:

(a) Draw a line segment OL = 7.5 cm

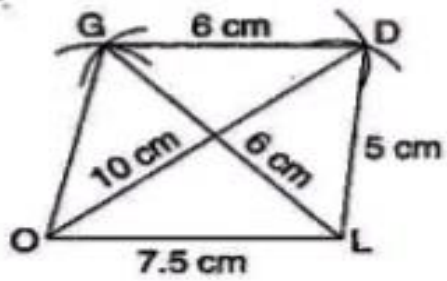
(b) Draw an arc of radius 5 cm taking L as centre and another arc of radius 10 cm taking O as centre which intersect the first arc point at D.

(c) Join LD and OD.

(d) Draw an arc of radius 6 cm from D and draw another arc of radius 6 cm taking L as centre, which intersects at G.

(e) Join GD and GO.

It is the required quadrilateral GOLD.



(iii) **Given:** BN = 5.6 cm, DE = 6.5 cm

To construct: A rhombus BEND.

Steps of construction:

(a) Draw DE = 6.5 cm.

(b) Draw perpendicular bisector of line segment DE.

(c) Draw two arcs of radius 2.8 cm from intersection point O, which intersects the line KN at B and N.

(d) Join BE, BD as well as ND and NE.

It is the required rhombus BEND.