

# Mathematics

(www.tiwariacademy.com)

(Chapter - 4) (Practical Geometry)

(Class - VIII)

## 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

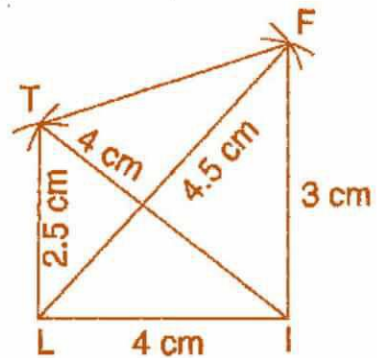
### Answer 1:

- (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 LI.



It is the required quadrilateral LIFT.

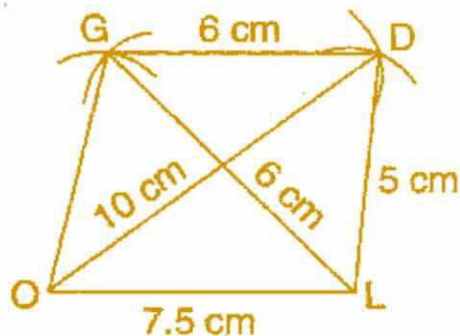
- (ii) **Given:** OL = 7.5 cm, GL = 6 cm, GD = 6 cm, LD = 5 cm, OD = 10 cm

**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.



www.tiwariacademy.com

A Free web support in Education

# Mathematics

(www.tiwariacademy.com)

(Chapter - 4) (Practical Geometry)

(Class - VIII)

(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.

