



NCERT Solutions for class 8 Maths chapter 4 Practical Geometry Ex-4.2

**Q1. Construct the following quadrilaterals:**

**(i) Quadrilateral LIFT**

$LI = 4 \text{ cm}$ ,  $IF = 3 \text{ cm}$ ,  $TL = 2.5 \text{ cm}$ ,  $LF = 4.5 \text{ cm}$ ,  
 $IT = 4 \text{ cm}$

**(ii) Quadrilateral GOLD**

$OL = 7.5 \text{ cm}$ ,  $GL = 6 \text{ cm}$ ,  $GD = 6 \text{ cm}$ ,  $LD = 5 \text{ cm}$ ,  
 $OD = 10 \text{ cm}$

**(iii) Rhombus BEND**

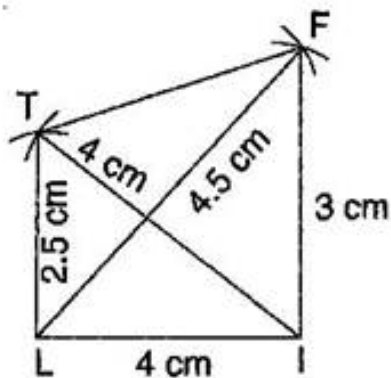
$BN = 5.6 \text{ cm}$ ,  $DE = 6.5 \text{ cm}$

**Ans:**

**(i) Given:**  $LI = 4 \text{ cm}$ ,  $IF = 3 \text{ cm}$ ,  $TL = 2.5 \text{ cm}$ ,  $LF = 4.5 \text{ cm}$ ,  
 $IT = 4 \text{ cm}$

**To construct:** A quadrilateral LIFT

**Steps of construction:**



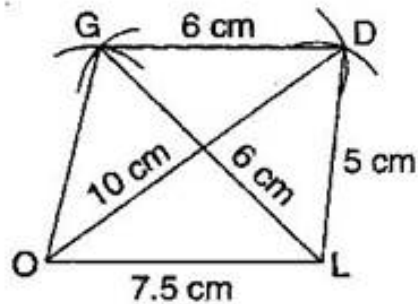
- (a) Draw a line segment  $LI = 4$  cm.
- (b) Taking radius 4.5 cm, draw an arc taking L as centre.
- (c) Draw an arc of 3 cm taking I as centre which intersects the first arc at F.
- (d) Join FI and FL.
- (e) Draw another arc of radius 2.5 cm taking L as centre and 4 cm taking I as centre which intersect at T.
- (f) Join TF, TI and TL.

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:**



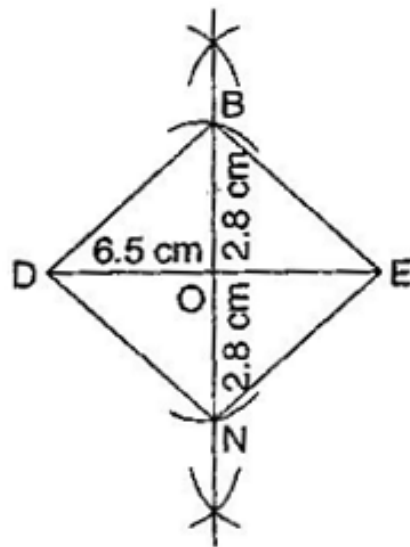
- (a) Draw a line segment  $OL = 7.5$  cm
- (b) Draw an arc of radius 5 cm taking L as centre and another arc of radius 10 cm taking O as centre which intersect the first arc point at D.
- (c) Join LD and OD.
- (d) Draw an arc of radius 6 cm from D and draw another arc of radius 6 cm taking L as centre, 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.

\*\*\*\*\* END \*\*\*\*\*