



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

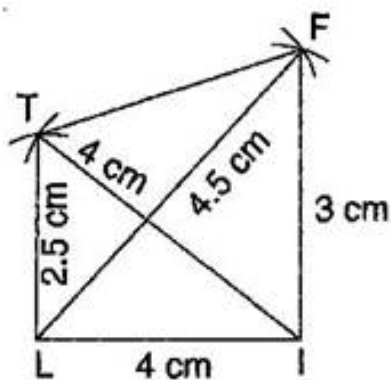
$BN = 5.6\text{ cm}$, $DE = 6.5\text{ cm}$

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:



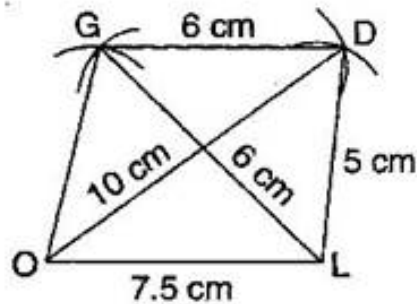
- (a) Draw a line segment $LI = 4$ cm.
- (b) Taking radius 4.5 cm, draw an arc taking L as centre.
- (c) Draw an arc of 3 cm taking I as centre which intersects the first arc at F.
- (d) Join FI and FL.
- (e) Draw another arc of radius 2.5 cm taking L as centre and 4 cm taking I as centre which intersect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



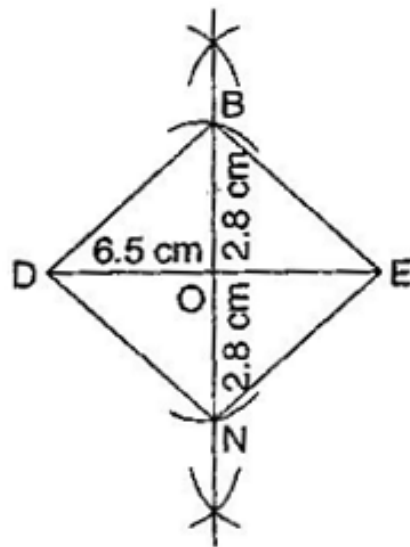
- (a) Draw a line segment $OL = 7.5$ cm
- (b) Draw an arc of radius 5 cm taking L as centre and another arc of radius 10 cm taking O as centre which intersect the first arc point at D.
- (c) Join LD and OD.
- (d) Draw an arc of radius 6 cm from D and draw another arc of radius 6 cm taking L as centre,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