



SpeedLabs

MATHS

CBSE 8th

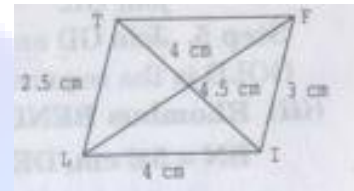
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Q.1 Construct the following quadrilaterals.

(i) Quadrilateral LIFT.

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

Sol: Here rough sketch of the quadrilateral LIFT is given alongside.



Construction: Step 1. Draw a line segment $LI = 4 \text{ cm}$,

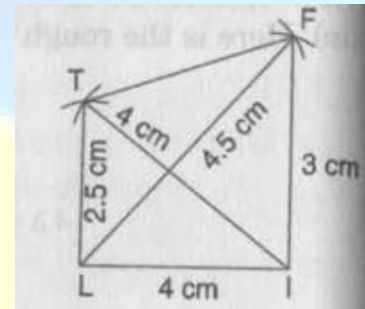
Step 2. Taking radius 4.5 cm draw an arc taking L as centre.

Step 3. Draw an arc of 3 cm taking I as centre which intersects the first arc at F and join FI and FL .

Step 4. Now, draw another arc of radius 2.5 cm taking L as centre and 4 cm taking I as centre.

Both arcs intersect at T . Join TF , TL and TI .

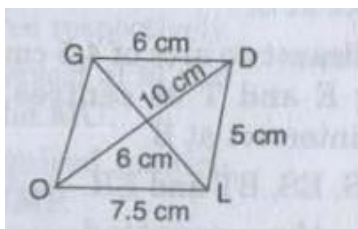
LIFT is the required quadrilateral.



(ii) Quadrilateral GOLD

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

Sol: Rough sketch of GOLD



Steps of construction:

Step 1. Draw a line segment $OL = 7.5 \text{ cm}$.

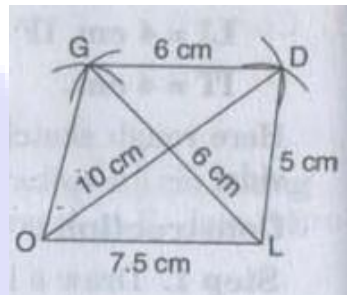
Step 2. Draw an arc of radius 5 cm taking L as centre and another arc of radius 10 cm taking O as centre which intersect the first arc point at D and join LD and OD.

Step 3. Now draw an arc of radius 6 cm from D and draw another arc of radius 6 cm taking L as centre.

Step 4. Which intersect at G. and join GL.

Step 5. Join GD and GO.

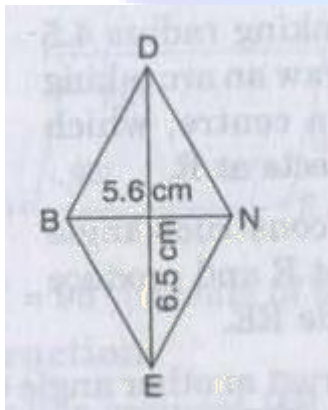
GOLD is the required quadrilateral.



(iii) Rhombus BEND

BN = 5.6 cm, DE = 6.5 cm

Sol: Rough sketch of BEND is given below:



Sol: Steps of construction:

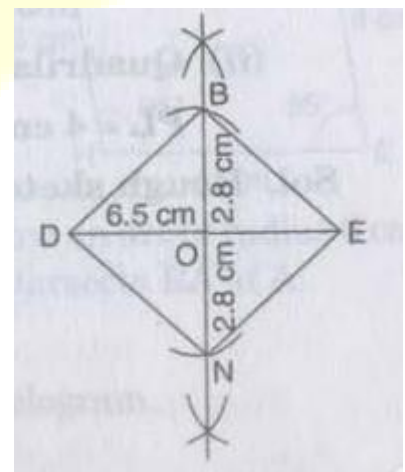
Step 1. Draw DE = 6.5 cm.

Step 2. Draw perpendicular bisector of line segment DE.

Step 3. Draw two arcs of radius 2.8 cm from intersection

point O, which intersects the line BN at Band N.

Step 4. Join BE, BD as well as ND and NE.



BEND is the required rhombus.

