



SpeedLabs

MATHS

CBSE 8th

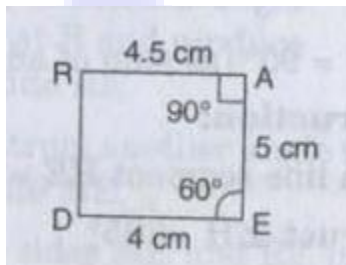
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Q.1 Construct the following quadrilaterals.

Sol: (i) Quadrilateral DEAR

$DE = 4 \text{ cm}$, $EA = 5 \text{ cm}$, $AR = 4.5 \text{ cm}$, $\angle E = 60^\circ$, $\angle A = 90^\circ$

Rough sketch of DEAR



Steps of construction:

Step 1. Draw a line-segment $DE = 4 \text{ cm}$.

Step 2. At point E, construct an angle of 60° .

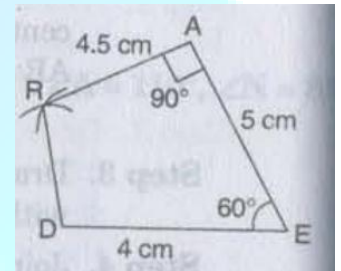
Step 3. Taking radius 5 cm , draw an arc from point E which intersects at A.

Step 4. Construct $\angle A = 90^\circ$, draw an arc of radius 4.5 cm with centre A

which intersect at R.

Step 5. Join RD.

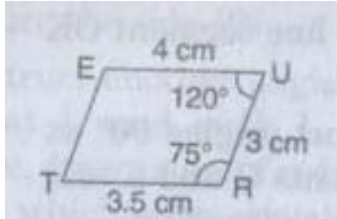
Hence, DEAR is the required quadrilateral.



(ii) Quadrilateral TRUE

$TR = 3.5 \text{ cm}$, $RU = 3 \text{ cm}$, $UE = 4 \text{ cm}$, $\angle R = 75^\circ$, $\angle U = 120^\circ$.

Rough sketch of TRUE



Steps of construction:

Step 1. Draw a line segment $TR = 3.5 \text{ cm}$.

Step 2. Construct angle 75° at R and, draw an arc of radius 3 cm with R as centre. Which intersect at U.

Step 3. Construct angle 120° at U and produce the side UE.

Step 4. Draw an arc of radius 4 cm with U as centre.

Step 5. Join UE and TE.

Hence, TRUE is the required quadrilateral.

