NCERT Solutions for class 8 Maths chapter 4 Practical Geometry Ex-4.4

Q1. Construct the following quadrilaterals:

(i) Quadrilateral DEAR

DE = 4 cm, EA = 5 cm, AR = 4.5 cm,

$\angle E = 60^\circ, \angle A = 90^\circ$

(ii) Quadrilateral TRUE

TR = 3.5 cm, RU = 3 cm, UE = 4 cm,

$\angle R = 75^\circ, \angle U = 120^\circ$

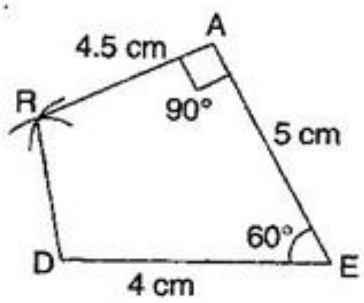
Ans.

(i) Given: DE = 4 cm, EA = 5 cm,

AR = 4.5 cm, $\angle E = 60^\circ, \angle A = 90^\circ$

To construct: A quadrilateral DEAR.

Steps of construction:



(a) Draw a line segment DE = 4 cm.

(b) At point E, construct an angle of 60°.

(c) Taking radius 5 cm, draw an arc from point E which intersects at A.

(d) Construct $\angle A = 90^\circ$, draw an arc of radius 4.5 cm with centre A which intersect at R.

(e) Join RD.

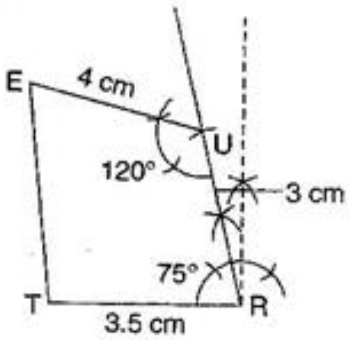
It is the required quadrilateral DEAR.

(ii) Given: TR = 3.5 cm, RU = 3 cm,

UE = 4 cm, $\angle R = 75^\circ$, $\angle U = 120^\circ$

To construct: A quadrilateral TRUE

Steps of construction:



(a) Draw a line segment TR = 3.5 cm.

(b) Construct an angle 75° at R and draw an arc of radius 3 cm with R as centre, which intersects at U.

(c) Construct an angle of 120° at U and produce the side UE.

(d) Draw an arc of radius 4 cm with U as centre.

(e) Join UE and TE.

It is the required quadrilateral TRUE.

********** END **********