CLASS NOTES-ANSWERS

EXERCISE 4.4

1. Construct the following quadrilaterals.

(i) Quadrilateral DEAR

DE = 4 cm

EA = 5 cm

AR = 4.5 cm

∠E = 60°

∠A = 90°

(ii) Quadrilateral TRUE

TR = 3.5 cm

RU = 3 cm
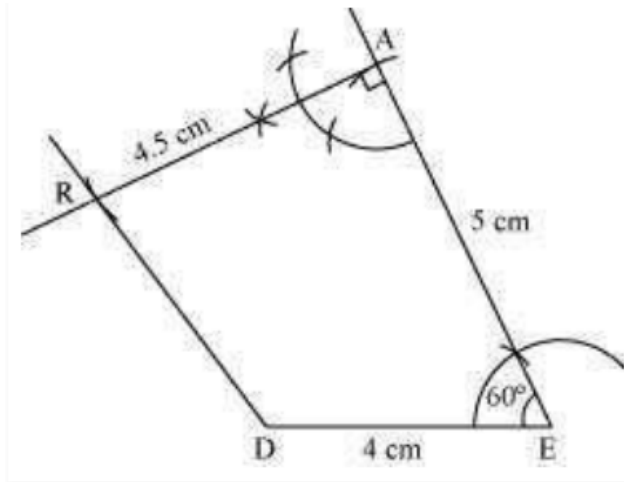
UE = 4 cm

∠R = 75°

∠U = 120°
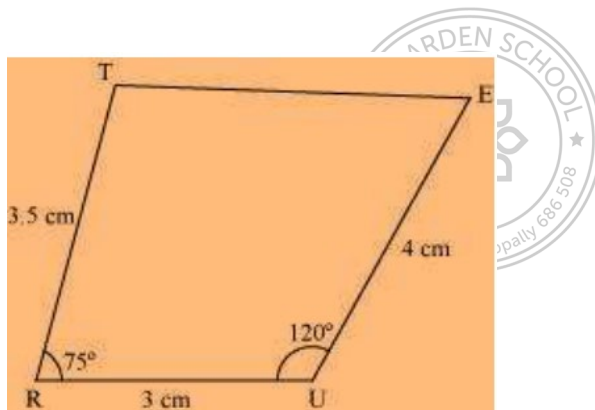
Answer:

(i) Rough sketch:
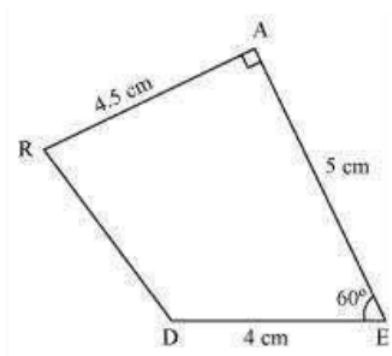
Steps of construction:

- Draw a line segment DE of 4 cm and an angle of 60º at point E. As vertex A is 5 cm away from vertex E, cut a line segment EA of 5 cm from this ray.

- Again, draw an angle of 90º at point A. As vertex R is 4.5 cm away from vertex A, cut a line segment RA of 4.5 cm from this ray.

- Join D to R.

- DEAR is the required quadrilateral.

(ii) Rough sketch:

Steps of construction:

- Draw a line segment RU of 3 cm and an angle of 120° at point U. As vertex E is 4 cm away from vertex U, cut a line segment UE of 4 cm from this ray.

- Next, draw an angle of 75° at point R. As vertex T is 3.5 cm away from vertex R, cut a line segment RT of 3.5 cm from this ray.

- Join T to E.

- TRUE is the required quadrilateral.