CLASS NOTES-ANSWERS

EXERCISE 4.1

1. Construct the following quadrilaterals.

(i) Quadrilateral ABCD.

AB = 4.5 cm

BC = 5.5 cm

CD = 4 cm

AD = 6 cm

AC = 7 cm

(ii) Quadrilateral JUMP

JU = 3.5 cm

UM = 4 cm

MP = 5 cm

PJ = 4.5 cm

PU = 6.5 cm

(iii) Parallelogram MORE

OR = 6 cm

RE = 4.5 cm

EO = 7.5 cm

(iv) Rhombus BEST

BE = 4.5 cm

ET = 6 cm

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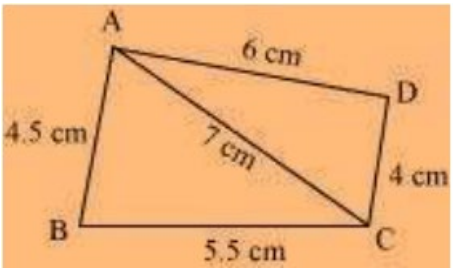
Answer:

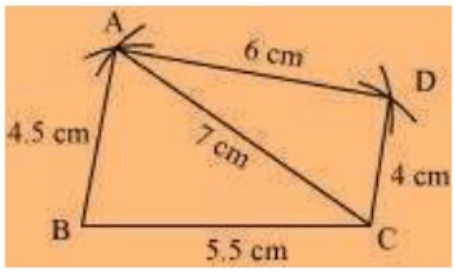
(i) Rough Sketch:



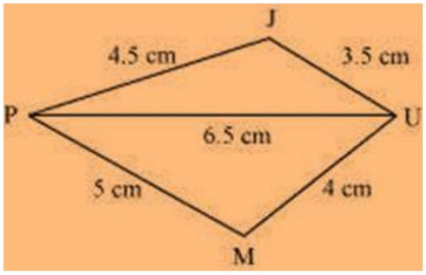
Steps of Construction:

- Construct ΔABC by using the measurements.
- Vertex D is 6 cm away from vertex A. Therefore, while taking A as the centre, draw an arc of radius 6 cm.

- Taking C as the centre, draw an arc of radius 4 cm, cutting the previous arc at point D. Joint D to A and C.
- ABCD is the required quadrilateral.



(ii) Rough Sketch:



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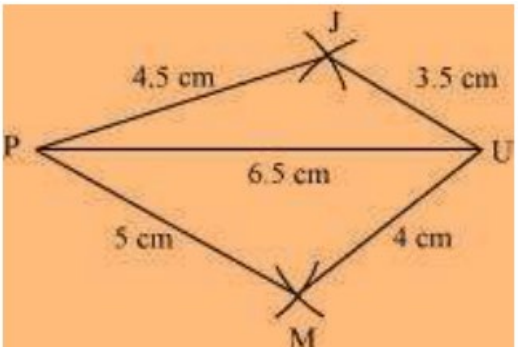
Steps of construction:

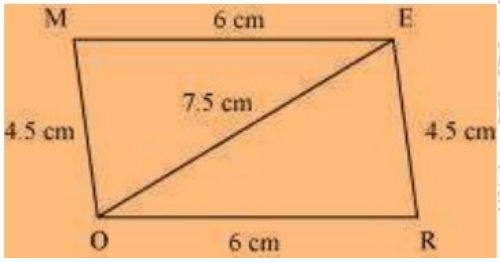
- Construct Δ JUP by using the given measurements.
- Vertex M is 5 cm away from vertex P and 4 cm away from vertex U. Taking P and U as centres, draw arcs of radii 5 cm and 4 cm, respectively. Let the point of intersection be M.
- Join M to P and U.
- JUMP is the required quadrilateral.



(iii) Opposite sides of a parallelogram are equal in length, and also, these are parallel to each other.

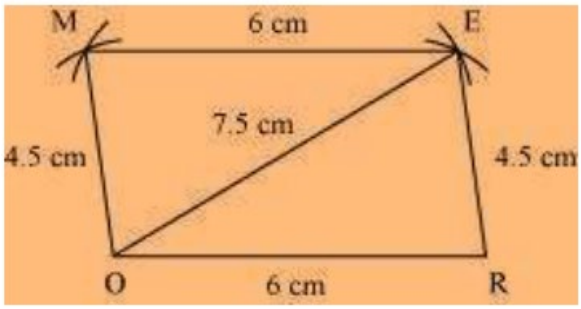
i.e., ME = OR, MO = ER

Rough sketch:



Steps of construction:

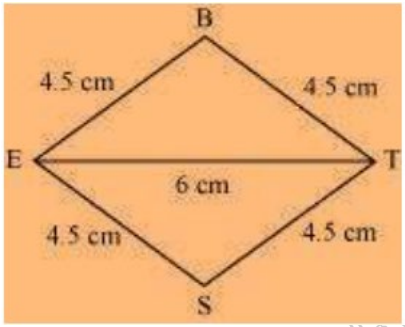
- Construct Δ EOR by using the given measurements
- Vertex M is 4.5 cm away from vertex O and 6 cm away from vertex E. Therefore, while taking O and E as centres, draw arcs of 4.5 cm radius and 6 cm radius, respectively. These will intersect each other at point M.
- Join M to O and E.
- MORE is the required parallelogram.



(iv) All sides of a rhombus are of the same measure.

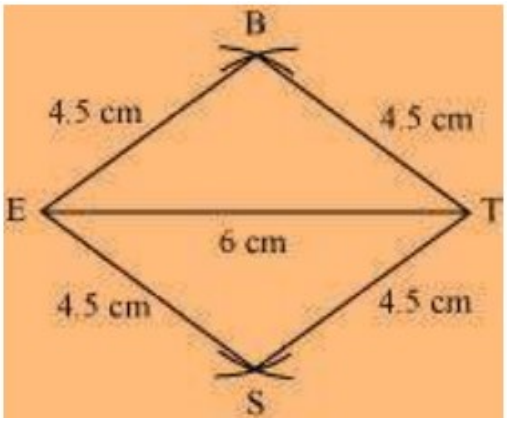
Hence, BE = ES = ST = TB

Rough sketch:



Steps of construction:

- Construct Δ BET by using the given measurements.
- Vertex S is 4.5 cm away from vertex E and also from vertex T. Therefore, while taking E and T as centres, draw arcs of 4.5 cm radius, which will intersect each other at point S.
- Join S to E and T.
- BEST is the required rhombus.



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