

CBSE Class –VIII Mathematics
NCERT Solutions
CHAPTER - 4
Practical Geometry (Ex. 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

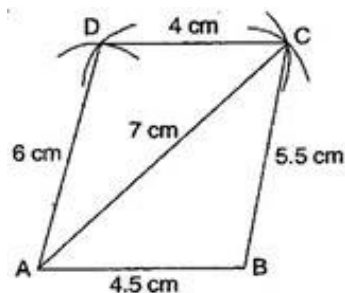
Ans. (i) Given: AB = 4.5 cm, BC = 5.5 cm, CD = 4 cm, AD = 6 cm, AC = 7 cm

To construct: A quadrilateral ABCD

Steps of construction:

- (a) Draw AB = 4.5 cm.
- (b) Draw an arc taking radius 5.5 cm from point B.
- (c) Taking radius 7 cm, draw an another arc from point A which intersects the first arc at point C.
- (d) Join BC and AC.
- (e) Draw an arc of radius 6 cm from point A and draw another arc of radius 4 cm from point C which intersects at D.
- (f) Join AD and CD.

It is required quadrilateral ABCD.



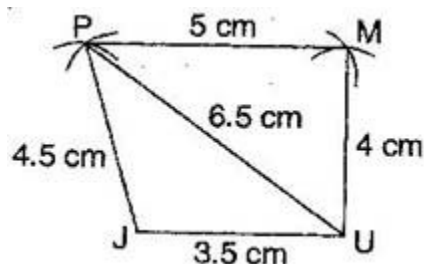
(ii) Given: $JU = 3.5$ cm, $UM = 4$ cm, $MP = 5$ cm, $PJ = 4.5$ cm, $PU = 6.5$ cm

To construct: A quadrilateral JUMP

Steps of construction:

- Draw $JU = 3.5$ cm.
- Draw an arc of radius 4.5 cm taking centre J and then draw another arc of radius 6.5 cm taking U as centre. Both arcs intersect at P.
- Join PJ and PU.
- Draw arc of radius 5 cm and 4 cm taking P and U as centres respectively, which intersect at M.
- Join MP and MU.

It is required quadrilateral JUMP.



(iii) Given: $OR = 6$ cm, $RE = 4.5$ cm, $EO = 7.5$ cm

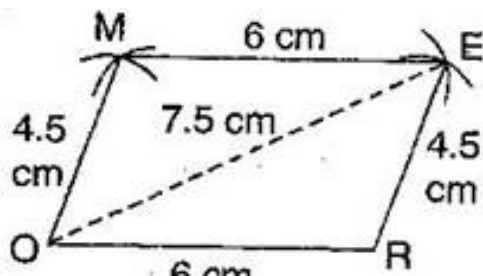
To construct: A parallelogram MORE

Steps of construction:

- Draw $OR = 6$ cm.
- Draw arcs of radius 7.5 cm and radius 4.5 cm taking O and R as centres respectively, which intersect at E.
- Join OE and RE.
- Draw an arc of 6 cm radius taking E as centre.
- Draw another arc of 4.5 cm radius taking O as centre, which intersects at M.

(f) Join OM and EM.

It is required parallelogram MORE.



(iv) **Given:** BE = 4.5 cm, ET = 6 cm

To construct: A rhombus BEST

Steps of construction:

- Draw TE = 6 cm and bisect it into two equal parts.
- Draw up and down perpendiculars to TE.
- Draw two arcs of 4.5 cm taking E and T as centres, which intersect at S.
- Again draw two arcs of 4.5 cm taking E and T as centres, which intersect at B.
- Join TS, ES, BT and EB.

It is the required rhombus BEST.

