

CBSE Class –VIII Mathematics
NCERT Solutions
CHAPTER - 4
Practical Geometry (Ex. 4.5)

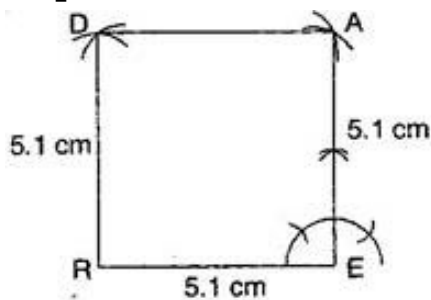
Draw the following:

1. The square READ with RE = 5.1 cm.

Solution : Given: RE = 5.1 cm

To construct: the square READ.

Steps of construction:



(i) Draw a line segment RE = 5.1 cm.

(ii) At point E, construct an angle of 90° and draw an arc of radius 5.1 cm, mark the intersection of line and arc as point A.

(iii) From point R, draw an arc of radius 5.1 cm and from point A, draw another arc of radius 5.1 cm, mark the intersection of the two arcs as point D.

(iv) Join AD and RD.

It is the required square READ.

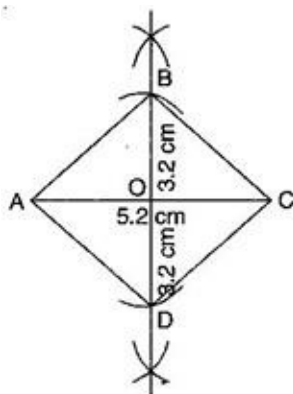
2. A rhombus whose diagonals are 5.2 cm and 6.4 cm.

Solution: Given: Diagonals of a rhombus

AC = 5.2 cm and BD = 6.4 cm.

To construct: A rhombus ABCD.

Steps of construction:



- (i) Draw $AC = 5.2$ cm and draw a perpendicular bisector on AC.
- (ii) From the midpoint O, draw two arcs of radius 3.2 cm cutting the perpendicular bisector on both sides.
- (iii) Mark the points of intersection of arcs and perpendicular bisector as B and D.
- (iv) Join AB, BC, CD and DA.

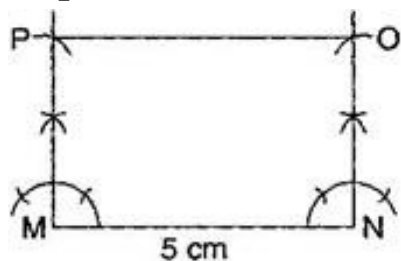
It is required rhombus ABCD.

3. A rectangle with adjacent sides of length 5 cm and 4 cm.

Solution: Given: $MN = 5$ cm and $MP = 4$ cm.

To construct: A rectangle MNOP

Steps of construction:



- (a) Draw a segment $MN = 5$ cm.
- (b) At points M and N, draw perpendiculars of lengths 4 cm and produce them.
- (c) Taking centres M and N, draw two arcs of 4 cm each, which intersect P and Q

respectively.

(d) Join side PO.

It is required rectangle MNOP.

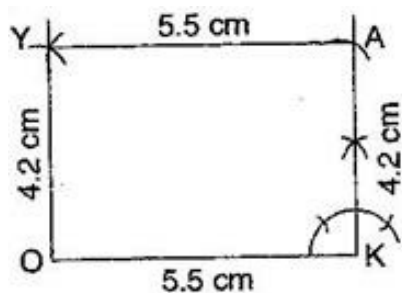
4. A parallelogram OKAY where $OK = 5.5$ cm and $KA = 4.2$ cm.

Solution:

Given: $OK = 5.5$ cm and $KA = 4.2$ cm.

To construct: A parallelogram OKAY.

Steps of construction:



(a) Draw a line segment $OK = 5.5$ cm.

(b) Draw an angle of 90° at K and draw an arc of radius $KA = 4.2$ cm, which intersects at point A.

(c) Draw another arc of radius $AY = 5.5$ cm and at point O, draw another arc of radius 4.2 cm which intersect at Y.

(d) Join AY and OY.

It is the required parallelogram OKAY.
