NCERT Solutions for class 8 Maths chapter 4 Practical Geometry Ex-4.5

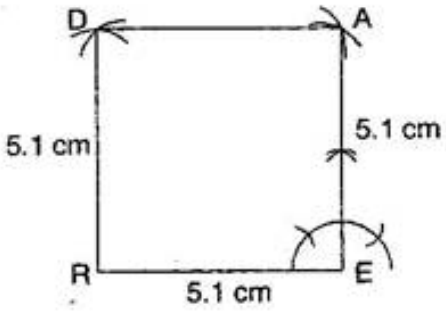
Draw the following:

Q1. The square READ with RE = 5.1 cm.

Ans: Given: RE = 5.1 cm.

To construct: A square READ.

Steps of construction:



(i) Draw RE = 5.1 cm.

(ii) At point E, construct an angle of 90° and draw an arc of radius 5.1 cm, which intersects at point A.

(iii) At point R, draw an arc of radius 5.1 cm at point A, draw another arc of radius 5.1 cm which intersects the first arc at point D.

(iv) Join AD and RD.

It is the required square READ.

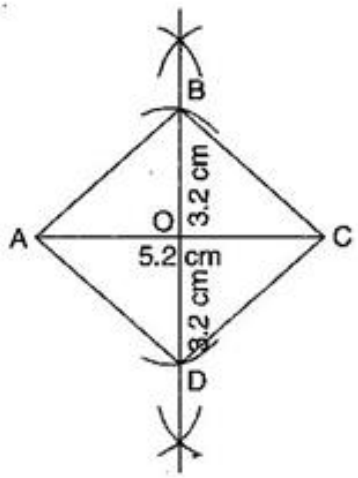
Q2. A rhombus whose diagonals are 5.2 cm and 6.4 cm.

Ans: Given: Diagonals of a rhombus

AC = 5.2 cm and BD = 6.4 cm.

To construct: A rhombus ABCD.

Steps of construction:



(a) Draw AC = 5.2 cm and draw perpendicular bisectors on AC.

(b) Since, diagonals bisect at mid-point O, therefore get half of 6.4 cm, i.e., 3.2 cm.

(c) Draw two arcs on both sides of AC of radius 3.2 cm from intersection point O, which intersects at B and D.

(d) Join AB, BC, CD and DA.

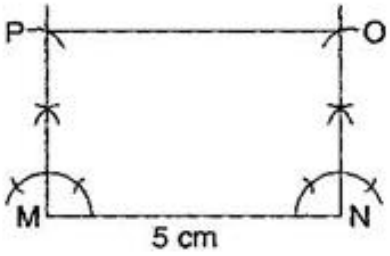
It is required rhombus ABCD.

Q3. A rectangle with adjacent sides of length 5 cm and 4 cm.

Ans: 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.

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