

24/9/2020  
THURSDAY

MATHEMATICS

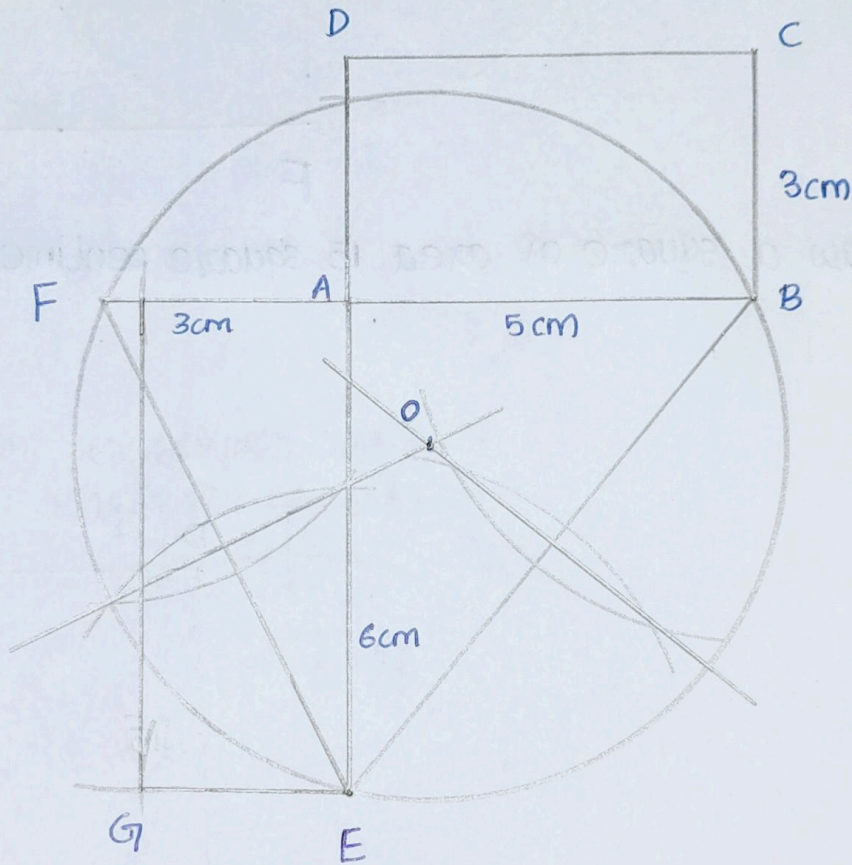
STD-8  
class-34

Textbook page no. 67

Question no. 2, 3, 4 Answers.

- 2) Draw a rectangle of width 5 cm and height 3 cm.
- i) Draw a rectangle of the same area with width 6 cm.
- ii) Draw a square of the same area.

Ans) i)

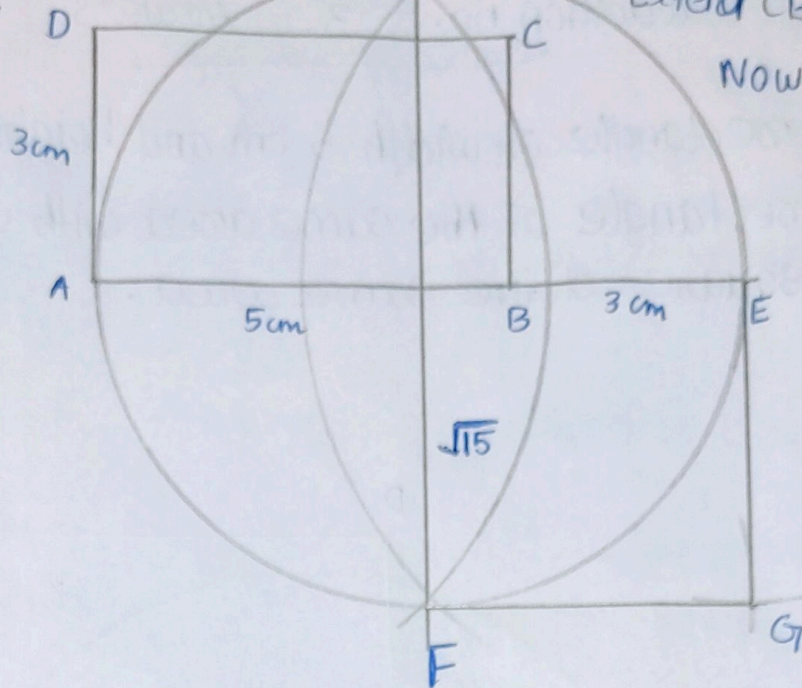




Draw the rectangle ABCD in the given measures.

ii) Extend AB to E such that  $BE = 3\text{cm}$ . Find the midpoint O of AE. Draw a circle with O as centre and OA as radius.

Extend CB to the circle.



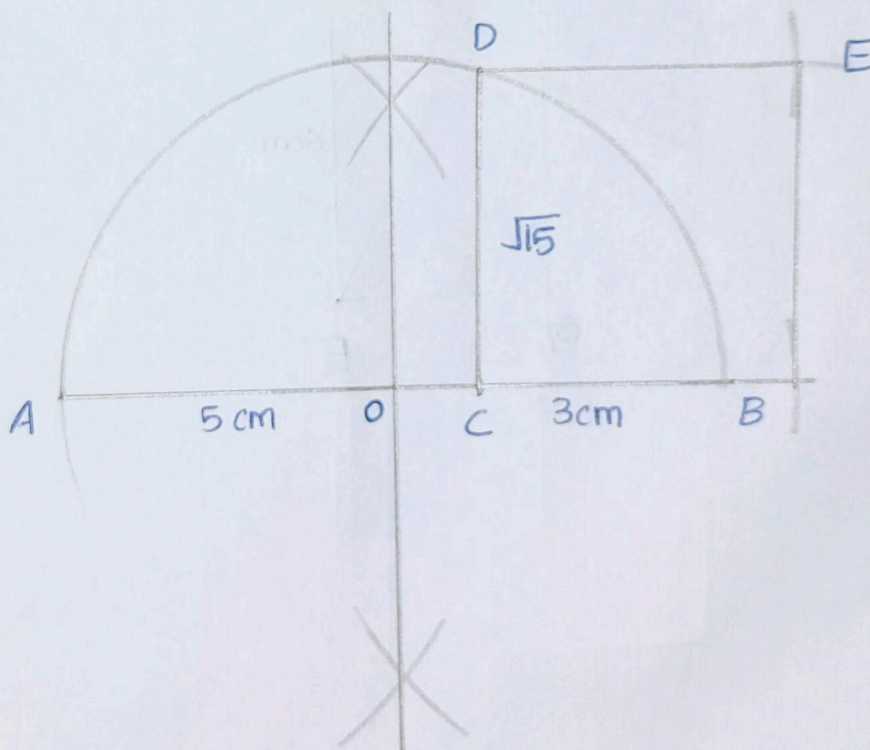
$$\text{Now } AB \times BE = BF^2$$

$$5 \times 3 = BF^2$$

$$BF = \underline{\underline{\sqrt{15}}}$$

3) Draw a square of area 15 square centimetres.

Ans)



4. Draw a square of area 5 square centimeters in three different ways. [Recall Pythagoras theorem]

Ans) i) Draw a square equal in area to a rectangle of length 5 cm and breadth 1 cm.

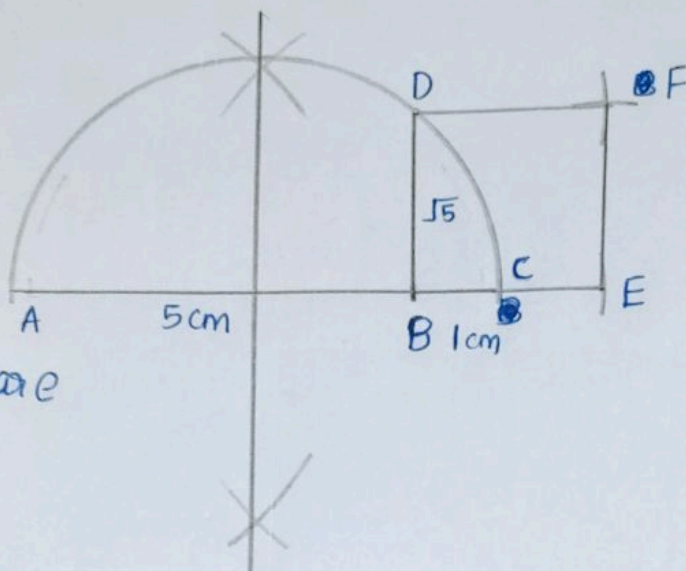
$$AB = 5 \text{ cm}$$

$$BC = 1 \text{ cm}$$

$$AB \times BC = BD^2$$

$$BD = \sqrt{5} \text{ cm}$$

BEFD is the required square



ii)

If the perpendicular sides of a right triangle are 2 cm and 1 cm.

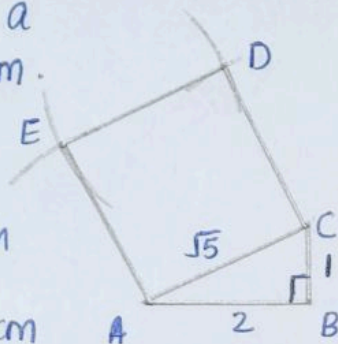
its hypotenuse =  $\sqrt{2^2 + 1^2}$

$$= \sqrt{4 + 1} = \sqrt{5} \text{ cm}$$

$$AB = 2 \text{ cm}$$

$$BC = 1 \text{ cm}$$

$$\angle B = 90^\circ, AC = \sqrt{5} \text{ cm}$$



iii) If the hypotenuse of a rectangle is 3 cm and one side is 2 cm, the third side

$$= \sqrt{3^2 - 2^2} = \sqrt{9 - 4}$$

$$= \sqrt{5} \text{ cm}$$

$$AB = 2 \text{ cm}, \angle A = 90^\circ$$

$$BC = 3 \text{ cm}, AC = \sqrt{5} \text{ cm}$$

