Cosmo School

Class-5

Subject-Mathematics

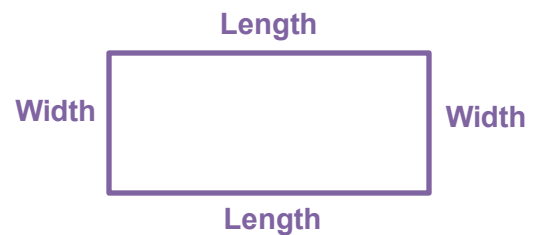**Chapter-11**

Measurement

Lecture-7

***What is area?**

Area is a measure of how much space there is on a flat surface.

***What is rectangle?**

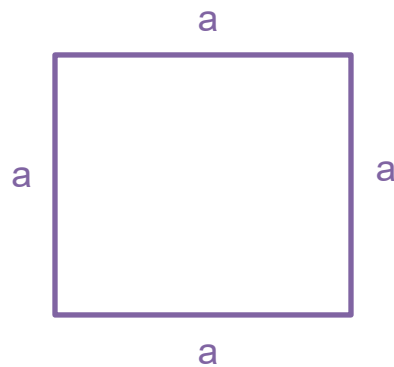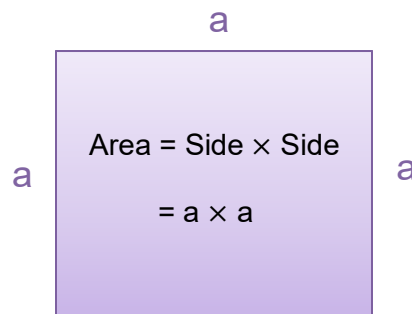A flat shape with four 90° angles and four sides, with opposite sides of equal length.

Length

Width | | **Width**

Length

Area of rectangle:

Length

Width   **Area = Length × Width**   **Width**

Length

Perimeter of rectangle = 2 × (Length + Width)

*What is square?

A square is a shape with four sides that are all the same length.

$$a$$

$$a \qquad \qquad a$$

$$a$$

Area of square:

$$a$$

$$a \quad \text{Area = Side} \times \text{Side} \quad a$$
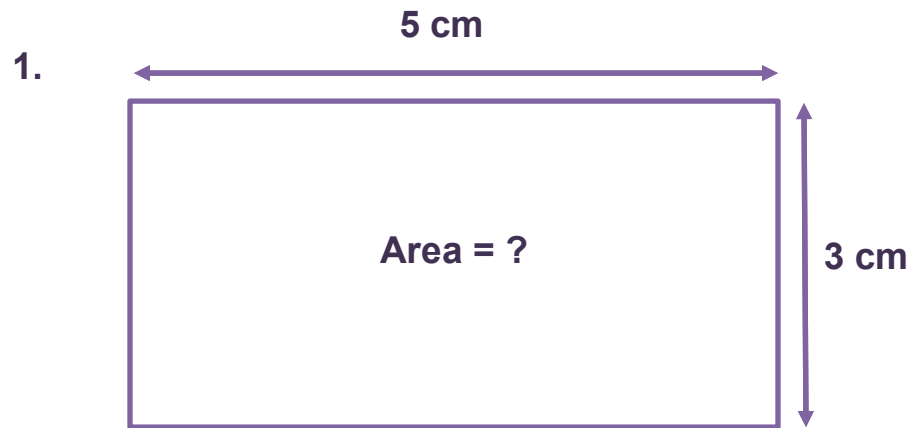
$$= a \times a$$

$$a$$

Perimeter of square = 4 × Side

Formula:

1) Area of rectangle = Length × Width

2) Length = Area ÷ Width

3) Width = Area ÷ Length

4) Perimeter of rectangle = 2 × (Length + Width)

5) Area of square = Side × Side

6) Perimeter of square = 4 × Side

7) 1 ayor = 100 m^2

8) 1 hectare = 1000 m^2

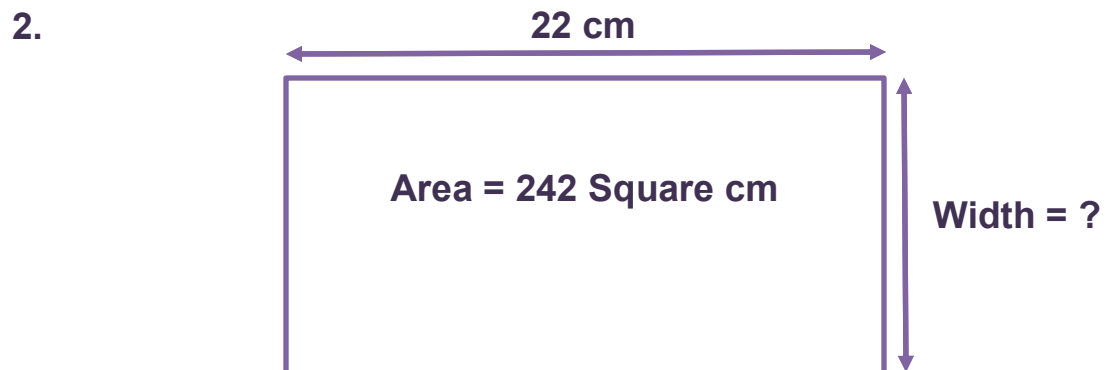**9)** 1 hectare = 100 ayor

10) 1 square km = 100 hectare

1.

5 cm

Area = ?

3 cm

Given,

    Length = 5 cm

    Width = 3 cm

We know,

    Area of rectangle = Length × Width

$$= (5 \times 3) \text{ Square cm}$$

$$= 15 \text{ Square cm}$$

    Ans: 15 Square cm.

2.

22 cm

Area = 242 Square cm

Width = ?

Given,

Area of rectangle = 242 Square cm

Length = 22 cm

We know,

Width = Area ÷ Length

= (242 ÷ 22) cm

= 11 cm

Ans: 11 cm.

3.

Length = ?

Area = 150 Square cm
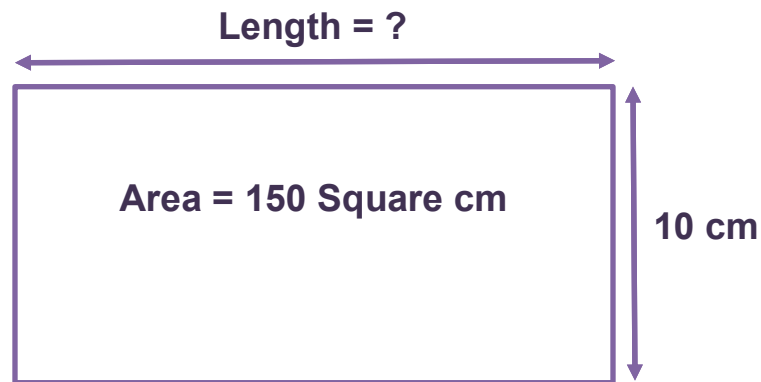
10 cm

Given,

Area of rectangle = 150 Square cm

Width = 10 cm

We know,

Length = Area ÷ Width

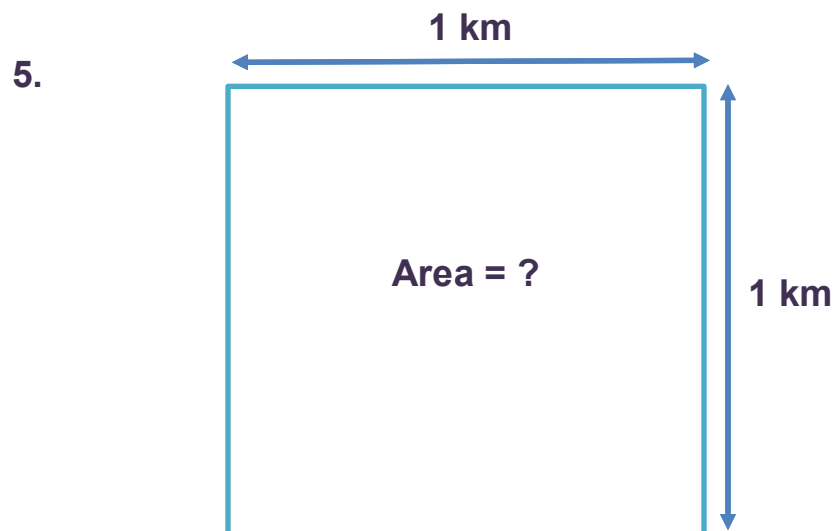= (150 ÷ 10) cm

= 15cm

Ans: 15 cm.

4.

4 cm

Area = ? 4 cm
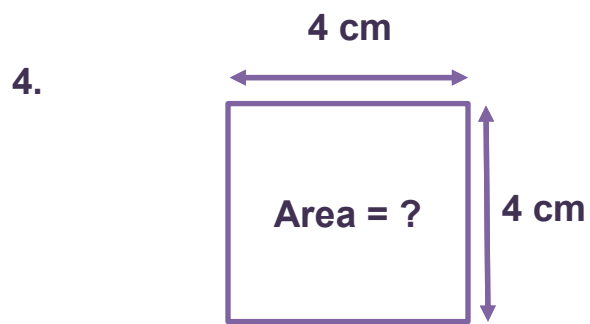
Given,

Side of a square = 4 cm

We know,

Area of square = Side × Side

= (4 × 4) Square cm

= 16 Square cm

Ans: 16 Square cm.

5.

1 km

Area = ? 1 km

Given,

Side of a square = 1 km

We know,

Area of square = Side × Side

= (1 × 1) Square km

= 1 Square cm

Ans: 1 Square cm.

Exercise (Do yourself)

1. There is a rectangular-shaped paddy field which width is 750 metres and the length is 1200 metres. What is the area of this paddy field?

2. The width of a rectangular-shaped park is 50 metres and its area is 4250 square metres. What is the length of this park?