Cosmo School

Class-5

Subject-Mathematics

Chapter-11(Measurement)

Lecture-11

Creative Question

Solution

1. The width of a rectangular shape is 40 cm and the length is 3 times more than the width.
   a. What is the area of the shape?
   b. If the length is increased by 10 cm, calculate the area of the shape.

2. The length of a rectangular pond is 96 meters, and the width is 60 meters.
   a. What is the area of the pond?
   b. How many meters in width need to be extended to make the pond square?
   c. What will the area be if the length of the pond is lessened 16 meters?

3. The area of a rectangular field is 336 sq meter. The length of the field is 2100cm.
   a. How many meters is the breadth of the field?
   b. If we let the length of this rectangular field as 1 arm of a square, what will be the area?
   c. If the area of the field is not changed and the length is 42 meters, what will be breadth?

1.a) Given ,

Width = 40 cm

∴ Length = 3 times of width

= (3 × 40) m

= 120 m

We know,
Area = Length × width
= (120 × 40) Sq. cm.
= 4800 Sq. cm.
Ans: 4800 Sq. cm.

b) If the length is increased by 10 cm,
Length = (120 + 10) cm = 130 cm
Width = 40 cm
We know,
Area = Length × width
= (130 × 40) Sq. cm.
= 5200 Sq. cm.
Ans: 5200 Sq. cm.

2.a) Given,
Length of the pond = 96 m
Width of the pond = 60 m
We know,
Area = Length × width
= (96 × 60) Sq. m.
= 5760 Sq. m.
Ans: 5760 Sq. m.

b) width is need to be extended to make the pond square = (96 − 60) m
= 36 m

∴ If we extend the length of the pond 36m then the pond will be in a square shape.

      Ans: 36m.

c) If the length of the pond is lessened 16 meters then,

$$Length = (96 - 16) \text{ m} = 80 \text{ m}$$
$$Width = 60 \text{ m}$$

We know,

$$Area = Length \times width$$
$$= (80 \times 60) \text{ Sq. m.}$$
$$= 4800 \text{ Sq. m.}$$

Ans: 4800 Sq. m.

3.a) Given,

Area of rectangular field = 336 Sq. m

$$Length = 2100 \text{ cm}$$
$$= (2100 \div 100) \text{ m } [\because 1\ cm = \frac{1}{100}\ m]$$
$$= 21 \text{ m}$$

We know,

$$Breadth = Area \div Length$$
$$= (336 \div 21) \text{ Sq. m.}$$
$$= 16 \text{ Sq. m.}$$

Ans: 16 Sq. m.

b) If we let the length of this rectangular field as 1 arm of a square then,

Side of a square = 21 m

We know,

$$Area = Side \times Side$$
$$= (21 \times 21) \text{ Sq. m.}$$
$$= 441 \text{ Sq. m.}$$

Ans: 441 Sq. m.

c) Given,

      Area of rectangular field = 336 Sq. m

                Length = 42 m

We know,

      Breadth = Area ÷ Length

             = (336 ÷ 42) Sq. m.

             = 8 Sq. m.

      Ans: 8 Sq. m.