

9/10/2020
FRIDAY

MATHEMATICS

STD - \bar{X}
class - 42

Assignment

1) In the figure there is a red square and two yellow rectangles attached to it. Side of the square and height of each rectangles are 'x' meters. Width of each rectangle is 'a' metre. What is the area of the small square added so that the rearranged figure becomes a large square.

Ans)

Side of the small square

$$= x \text{ (given)}$$

$$\therefore \text{Area} = x^2$$

Width of the rectangle

$$= a \text{ unit}$$

And its height = x

$$\therefore \text{Area of the rectangle} = a \times x = \underline{ax}$$

There are two rectangles in the figure.

$$\therefore \text{Total area} = \underline{x^2 + 2ax}$$

If we want to rearrange the figure into a large square, we want a 'a' unit sided small square

Like this,

$$\therefore x^2 + 2ax + a^2 = (x+a)^2$$

\therefore Area of the small square

$$= \underline{\underline{a^2}}$$

