

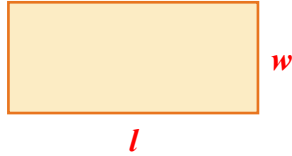
Area of Rectangles and Squares

The area of a figure is the number of squares required to cover it completely.

Area of rectangle

$$A = l w$$

$l$  = length,  $w$  = width



Area of square

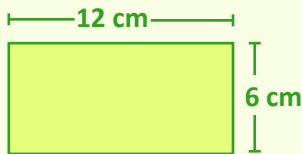
$$A = s \times s$$

$s$  = side length of Square



Example 1

What is the area of the following rectangle?



Explanation

$$A = l w$$

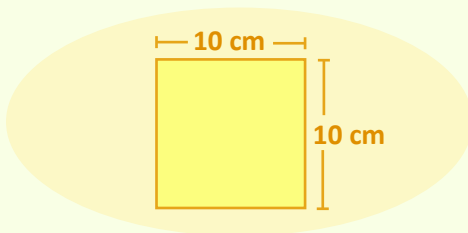
$$= 12 \times 6$$

$$= 72 \text{ cm}^2$$

Therefore, the area of the following rectangle is  $72 \text{ cm}^2$ .

Example 2

What is the area of the following square?



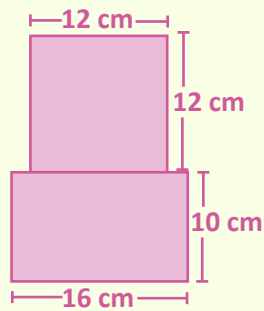
### Explanation

$$\begin{aligned}A &= s \times s \\ &= 10 \times 10 \\ &= 100 \text{ cm}^2\end{aligned}$$

Therefore, the area of the following square is  $100 \text{ cm}^2$ .

### Example 3

Calculate the area of the following figure.



### Explanation

There are one rectangle and one square in the graph.

$$\begin{aligned}\text{Rectangle: } A &= l w \\ &= 16 \times 10 \\ &= 160 \text{ m}^2\end{aligned}$$

$$\begin{aligned}\text{Square: } A &= s \times s \\ &= 12 \times 12 \\ &= 144 \text{ m}^2\end{aligned}$$

$$\text{Sum: } 160 \text{ m}^2 + 144 \text{ m}^2 = 304 \text{ m}^2.$$

Therefore, the area of the figure is  $304 \text{ m}^2$ .