

Mathematics

Area and Perimeter

Read and Understand

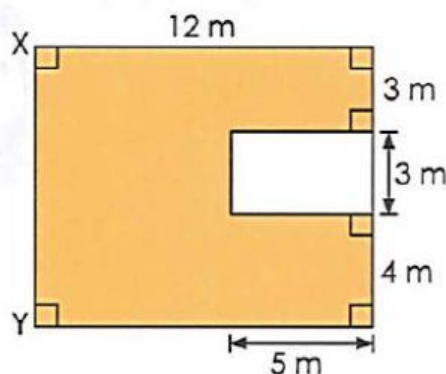
Thursday

Finding area of composite figures by subtracting areas of rectangles

Let's Learn

- a) Find the area of the shaded figure.

Picture It



The figure is made up of a small rectangle in a big rectangle.



1 2 4
3 +

Area of shaded figure
= Area of big rectangle – Area of small rectangle

$$\begin{aligned}\text{Area of big rectangle} &= 12 \times XY \\ &= 12 \times 10 \\ &= 120 \text{ m}^2\end{aligned}$$

$$\begin{aligned}XY &= 3 + 3 + 4 \\ &= 10 \text{ m}\end{aligned}$$

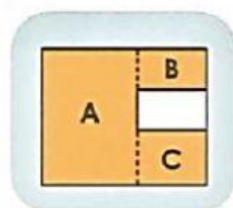


$$\begin{aligned}\text{Area of small rectangle} &= 5 \times 3 \\ &= 15 \text{ m}^2\end{aligned}$$

$$\begin{aligned}\text{Area of shaded figure} &= 120 - 15 \\ &= 105 \text{ m}^2\end{aligned}$$

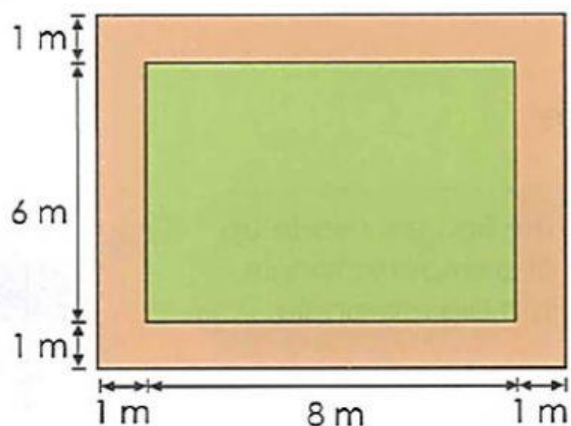
The area of the shaded figure is 105 square meters.

Think of another way to find the shaded area.
Which method is easier?



Read and Understand

- b) The figure shows a rectangle with a border 1 meter wide around it. Find the area of the border.



Area of the border
= Area of big rectangle
– Area of small rectangle



$$\begin{aligned}\text{Area of big rectangle} &= 10 \times 8 \\ &= \boxed{} \text{ m}^2\end{aligned}$$

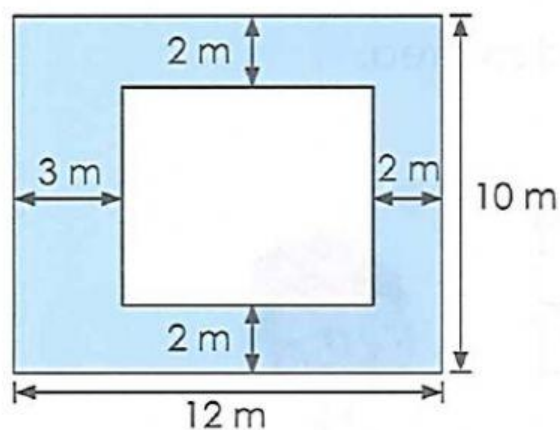
$$\begin{aligned}\text{Area of small rectangle} &= 8 \times 6 \\ &= \boxed{} \text{ m}^2\end{aligned}$$

$$\begin{aligned}\text{Area of border} &= \boxed{} - \boxed{} \\ &= \boxed{} \text{ m}^2\end{aligned}$$

The area of the border is $\boxed{}$ square meters.

Do

The figure shows a small rectangle in a big rectangle. Find the area of the shaded part of the big rectangle.



Area of shaded part
= Area of big rectangle
– Area of small rectangle

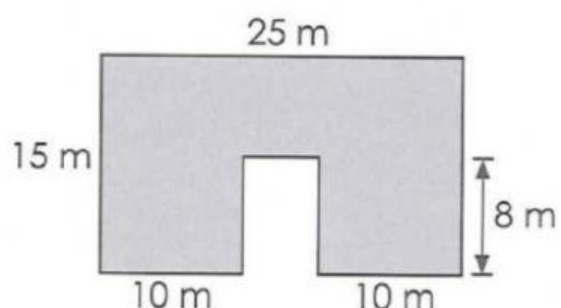
$$\boxed{} \text{ cm}^2$$



Work it out on paper and type only the answer in the blocks.

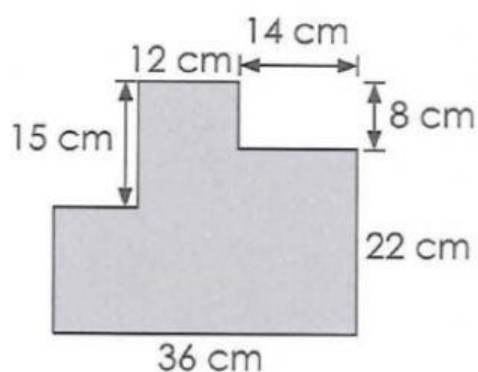
Find the area of each figure.
All sides meet at right angles.

a)



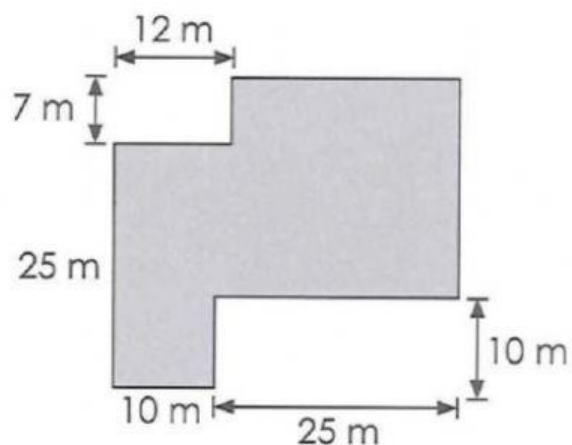
cm²

b)



cm²

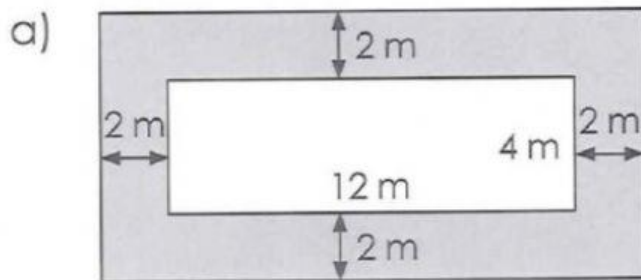
c)



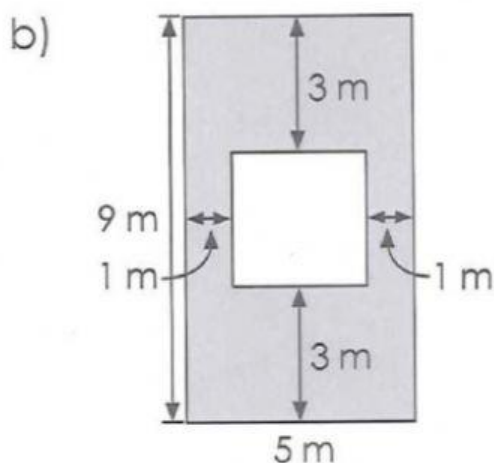
cm²

Work it out on paper and type only the answer in the

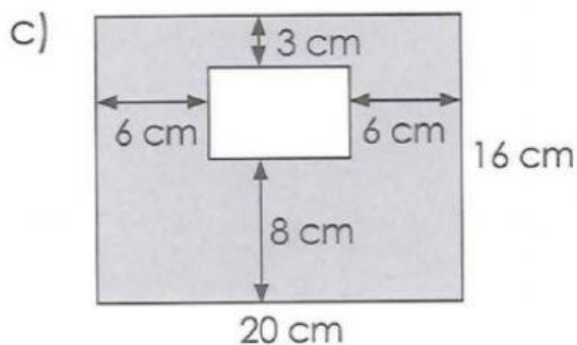
Each figure shows a small rectangle in a big rectangle. Find the area of the shaded part of each figure. **blocks.**



cm^2



cm^2



cm^2