

Mathematics

Area and Perimeter

Read and Understand

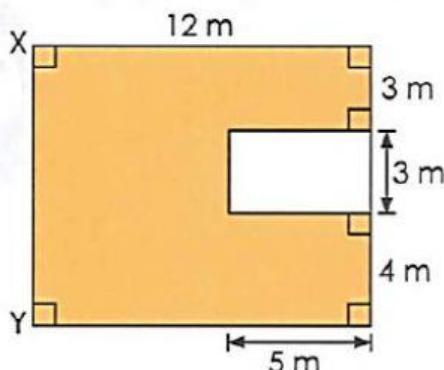
Thursday

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.



1.4
3+

Area of shaded figure

$$= \text{Area of big rectangle} - \text{Area of small rectangle}$$

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

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

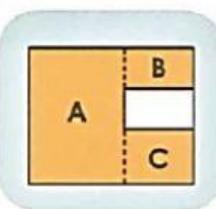


$$\begin{aligned}\text{Area of small rectangle} &= 5 \times 3 \\ &= 15 \text{ m}^2\end{aligned}$$

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

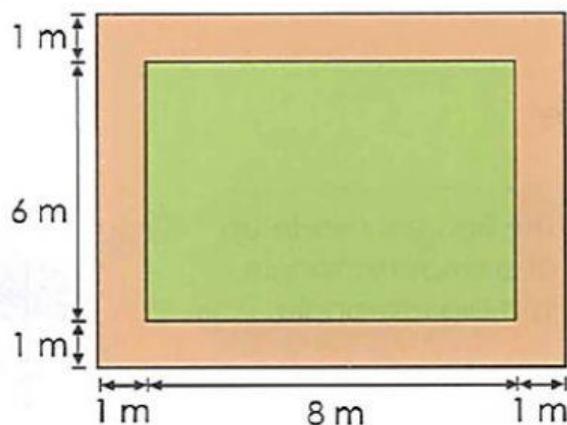
The area of the shaded figure is 105 square meters.

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



$$\text{Area of big rectangle} = 10 \times 8 \\ = \boxed{\text{green}} \text{ m}^2$$

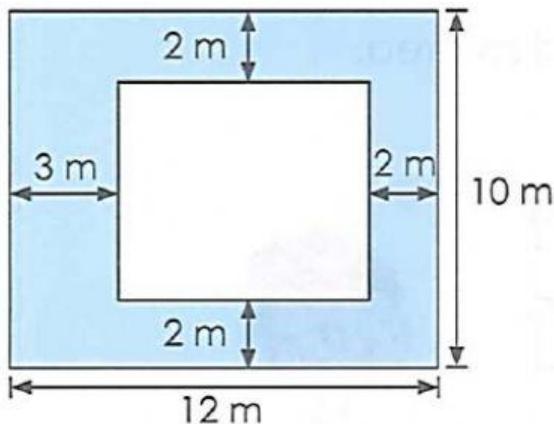
$$\text{Area of small rectangle} = 8 \times 6 \\ = \boxed{\text{green}} \text{ m}^2$$

$$\text{Area of border} = \boxed{\text{green}} - \boxed{\text{green}} \\ = \boxed{\text{green}} \text{ m}^2$$

The area of the border is $\boxed{\text{green}}$ 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

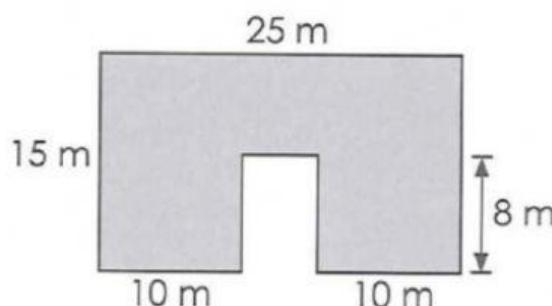
$\boxed{\text{black}}$ cm^2



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

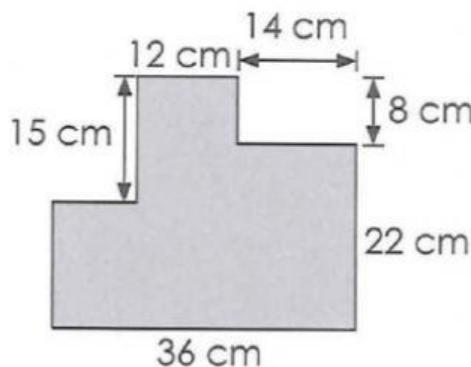
Find the area of each figure.
All sides meet at right angles.

a)



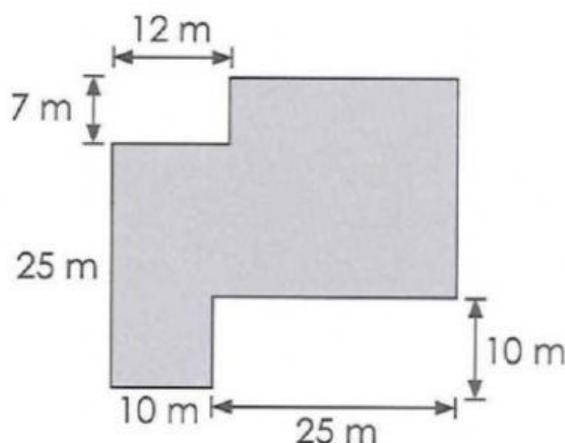
cm²

b)



cm²

c)

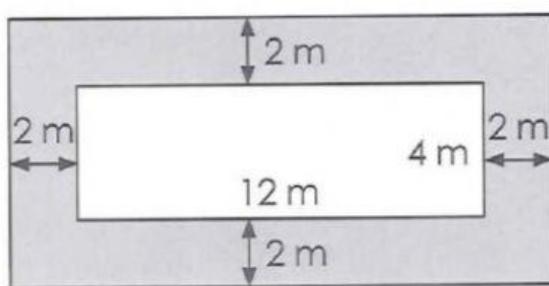


cm²

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

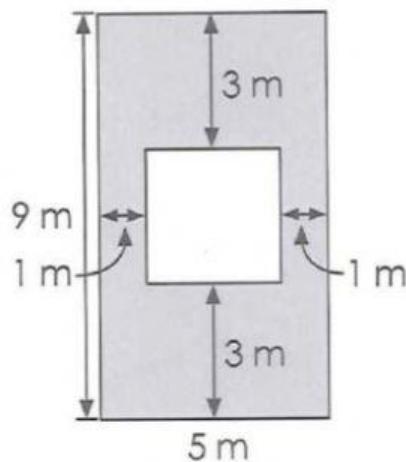
Each figure shows a small rectangle in a big rectangle. Find the area of the shaded part of each figure.

a)



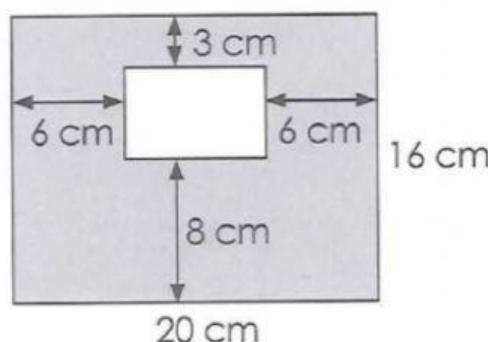
cm²

b)



cm²

c)



cm²