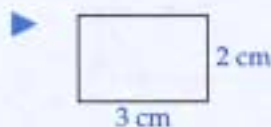


15 Area of Rectangles and Parallelograms

Here's How

Area is the number of square units needed to cover a shape or figure.

Find the area of this rectangle.



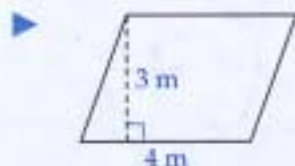
The length (l) of this rectangle is 3 cm.
The width (w) of this rectangle is 2 cm.

This is the formula for finding the area of a rectangle. *Area equals length times width.*

▶
$$\begin{aligned} A &= l \cdot w \\ &= 3 \text{ cm} \cdot 2 \text{ cm} \\ &= 6 \text{ cm}^2 \end{aligned}$$

Use this formula to find the area (A) of a rectangle.
It takes 6 square centimeters to cover this rectangle. The area is 6 cm^2 .

Find the area of this parallelogram.



The base (b) of this parallelogram is 4 m.
The height (h) of this parallelogram is 3 m.

This is the formula for finding the area of a parallelogram. *Area equals base times height.*

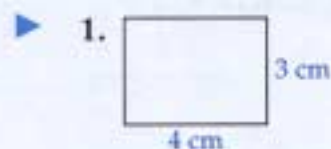
▶
$$\begin{aligned} A &= b \cdot h \\ &= 4 \text{ m} \cdot 3 \text{ m} \\ &= 12 \text{ cm}^2 \end{aligned}$$

Use this formula to find the area of a parallelogram.
The area is 12 square meters, or 12 m^2 .

Try These

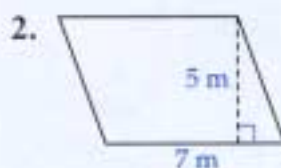
Find each area.

Be sure to include cm^2 or m^2 in your answer.



$$A = 4 \text{ cm} \cdot 3 \text{ cm}$$

$$= \underline{\hspace{2cm}}$$



$$A = 7 \text{ m} \cdot 5 \text{ m}$$

$$= \underline{\hspace{2cm}}$$

Go Ahead

TIP

Area of a rectangle:

$$A = l \cdot w$$

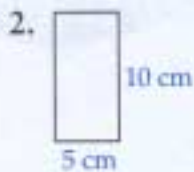
Area of a parallelogram:

$$A = b \cdot h$$

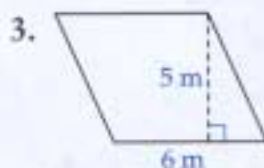
Find each area.



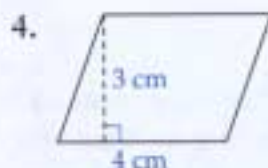
$$A = \underline{\hspace{2cm}}$$



$$A = \underline{\hspace{2cm}}$$

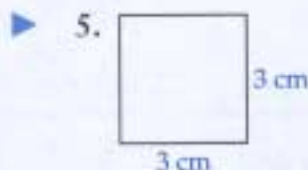


$$A = \underline{\hspace{2cm}}$$

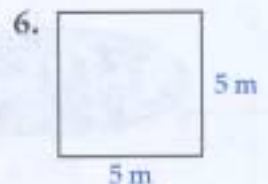


$$A = \underline{\hspace{2cm}}$$

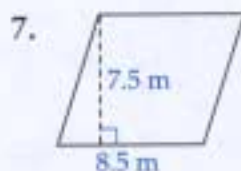
Since the sides of a square all have the same measure, use the formula $A = s \cdot s$.



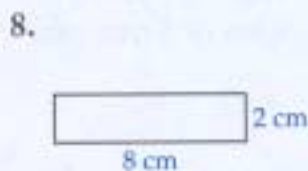
$$A = \underline{\hspace{2cm}}$$



$$A = \underline{\hspace{2cm}}$$



$$A = \underline{\hspace{2cm}}$$



$$A = \underline{\hspace{2cm}}$$

9. The storage area of a moving van is 6 meters long and 3 meters wide. How many square meters of storage space does the van have?

