



Lesson 5.9 Area: Rectangles

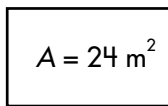
The **area** of a figure is the number of square units inside that figure. Area is expressed in **square units** or **units²**.

The area of a rectangle is the product of its length and its width.

5 cm  $A = \ell \times w$
 $A = 5 \times 10 = 50 \text{ cm}^2$
 10 cm

5 cm  $A = 5 \times 5$
 $A = 5 \times 5$ or 5^2
 $A = 25 \text{ cm}^2$

If you know the area of a rectangle and either its length or its width, you can determine the unknown measure.

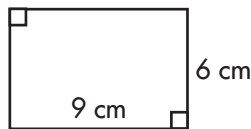
 $A = \ell \times w$
 $24 = 6 \times w$
 $\frac{24}{6} = \frac{6w}{6}$
 $4 = w$

The width is 4 meters.

Find the unknown measure for each rectangle.

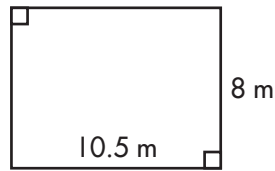
a

1.



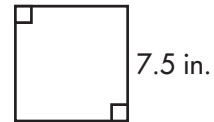
area = _____ cm^2

b



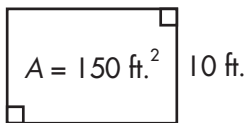
area = _____ m^2

c

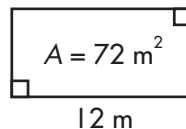


area = _____ in.^2

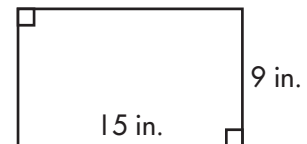
2.



length = _____ ft.

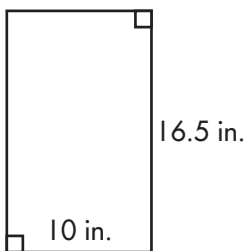


width = _____ m

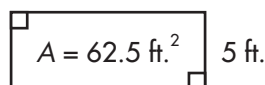


area = _____ in.^2

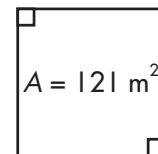
3.



area = _____ in.^2



length = _____ ft.



side = _____ m