Area of a Rectangle

To find the area of a rectangle, use the formula **length x width = area**.
This formula is often written as **l x w = A**.

The rectangle pictured here has a length of 10 cm and a width of 8 cm.

\[ l = 10 \text{ cm} \]
\[ w = 8 \text{ cm} \]

\[ 10 \text{ cm} \times 8 \text{ cm} = 80 \text{ cm}^2 \]

Note that the area’s unit is written as **cm}^2**.
This is said as “square centimeters” or “centimeters squared”.

Find the area of each rectangle.

**a.**

**b.**

**c.**

**d.**

**e.**

**f.**

**Challenge:** Find the area of the polygon. All corners are 90°. Use the back if you need work space.
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### Find the area of each rectangle.

a. 2.5 cm
   0.25 cm

b. 7 \( \frac{1}{2} \) ft
   12 \( \frac{1}{2} \) ft

c. 1.8 km
   2.0 km

d. 6 \( \frac{1}{2} \) in.

e. 30.0 mm
   3.5 mm

f. 4 \( \frac{3}{4} \) mi
   5 mi

### Challenge:
Find the area of the polygon. All corners are 90°. Use the back if you need work space.

\[ \text{area of } A = 2.4 \times 1.6 = 3.84 \text{ m}^2 \]
\[ \text{area of } B = 1.0 \times 0.4 = -0.40 \text{ m}^2 \]
\[ \text{area of } C = 0.4 \times 0.4 = +0.16 \text{ m}^2 \]

\[ \text{area of } A = 3.84 \text{ m}^2 \]
\[ \text{area of } B = -0.40 \text{ m}^2 \]
\[ \text{area of } C = +0.16 \text{ m}^2 \]

\[ \text{Total area} = 3.84 \text{ m}^2 + (-0.40 \text{ m}^2) + 0.16 \text{ m}^2 = 3.60 \text{ m}^2 \]