Area of a Rectangle

To find the area of a rectangle, use the formula \text{length} \times \text{width} = \text{area}. This formula is often written as \( l \times w = A \).

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 \( \text{cm}^2 \).
This is said as “square centimeters” or “centimeters squared”.

Find the area of each rectangle.

a. \hspace{2cm} b. \hspace{2cm} c.

\[ \begin{array}{c}
9 \text{ cm} \\
3 \text{ ft} \\
4 \text{ km}
\end{array} \] 
\[ \begin{array}{c}
10 \text{ cm} \\
10 \text{ ft} \\
2 \text{ km}
\end{array} \] 
\[ \begin{array}{c}
3 \text{ m} \\
5 \text{ km}
\end{array} \]

\[ \begin{array}{c}
12 \text{ in.} \\
6 \text{ in.} \\
6 \text{ mm}
\end{array} \] 
\[ \begin{array}{c}
7 \text{ mm} \\
6 \text{ mm} \\
5 \text{ mi}
\end{array} \] 
\[ \begin{array}{c}
12 \text{ in.} \\
8 \text{ mi}
\end{array} \]

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

\[ \begin{array}{c}
3 \text{ m} \\
11 \text{ m}
\end{array} \]

\[ \begin{array}{c}
12 \text{ m} \\
3 \text{ m}
\end{array} \]

\[ \begin{array}{c}
3 \text{ m} \\
12 \text{ m}
\end{array} \]
Area of a Rectangle

To find the area of a rectangle, use the formula \( \text{length} \times \text{width} = \text{area} \). This formula is often written as \( l \times w = A \).

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 \( \text{cm}^2 \). This is said as “square centimeters” or “centimeters squared”.

Find the area of each rectangle.

- **a.**
  - \( 9 \text{ cm} \)
  - 81 cm²

- **b.**
  - \( 10 \text{ ft} \)
  - 30 ft²

- **c.**
  - \( 4 \text{ km} \)
  - 8 km²

- **d.**
  - \( 12 \text{ in.} \)
  - 72 in²

- **e.**
  - \( 7 \text{ mm} \)
  - 42 mm²

- **f.**
  - \( 5 \text{ mi} \)
  - 40 mi²

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

- \( A \)
  - \( 3 \text{ m} \) x \( 3 \text{ m} \) = 9 m²

- \( B \)
  - \( 12 \text{ m} \) x \( 11 \text{ m} \) = 132 m²
  - \( \frac{132 \text{ m}^2}{141 \text{ m}^2} \)