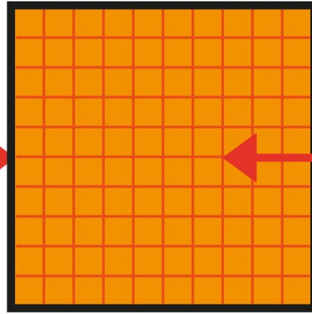


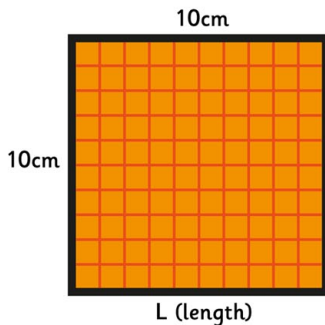
Area and Perimeter

The **perimeter** is the distance around the outside of a shape.



The **area** is the amount of space inside the perimeter.

square



To find the perimeter

$$\begin{aligned}\text{perimeter} &= L + L + L + L \\ &= 10 + 10 + 10 + 10 \\ &= 40\text{cm}\end{aligned}$$

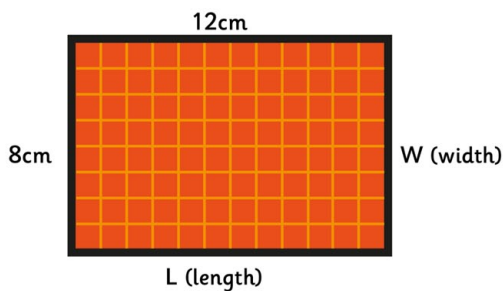
in short: $\text{perimeter} = 4L$

To find the area

$$\begin{aligned}\text{area} &= L \times L \\ &= 10 \times 10 \\ &= 100\text{cm}^2\end{aligned}$$

in short: $\text{area} = L^2$

rectangle



To find the perimeter

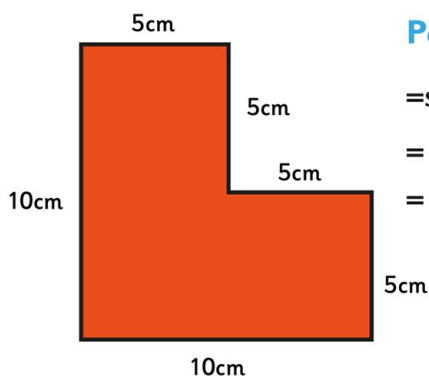
$$\begin{aligned}\text{perimeter} &= L + W + L + W \\ &= 12 + 8 + 12 + 8 \\ &= 40\text{cm}\end{aligned}$$

in short: $\text{perimeter} = 2L + 2W$

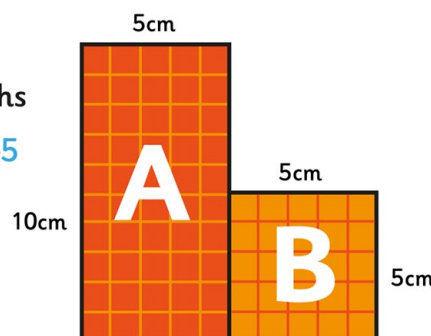
To find the area

$$\begin{aligned}\text{area} &= L \times W \\ &= 12 \times 8 \\ &= 96\text{cm}^2\end{aligned}$$

complex shapes With complex shapes, it is easier to break it down into smaller parts



Perimeter =
= sum of all lengths
 $= 10 + 10 + 5 + 5 + 5 + 5$
 $= 40\text{cm}$



To find the area

$$\begin{aligned}\text{area A} &= 10 \times 5 \\ \text{area A} &= 50\text{cm}^2 \\ \text{area B} &= 5 \times 5 \\ \text{area B} &= 25\text{cm}^2 \\ \text{A+B} &= 75\text{cm}^2\end{aligned}$$