Perimeter and Area

Perimeter: The total distance around the outside of a shape.

(The length of its outline)

Measured in units of length (mm,cm,m,km)

Area: The space a shape takes up.

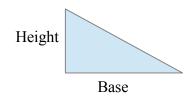
Measured in units of area (mm^2, cm^2, m^2)

The area of a rectangle is length x breadth



Notice the area of a square is a special case because all sides are equal so length = breadth

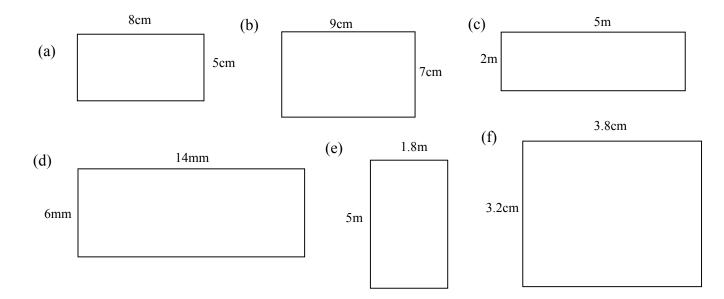
The area of a triangle is base x height



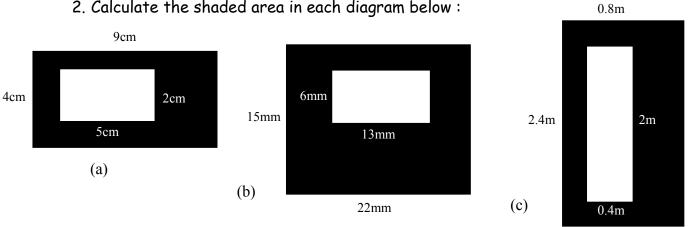
Remember: There must be a right angle between the base and the height.

The area of a <u>composite shape</u> can be found by breaking the shape into its more simple components and finding the area of each.

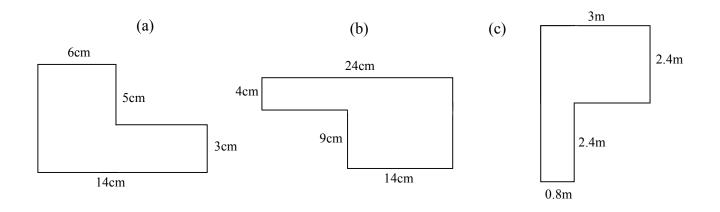
Calculate the area and the perimeter of each rectangle below:



2. Calculate the shaded area in each diagram below :



3. Calculate the area of each composite shape below:



<u>Answers</u>

1. a) $A = 40 \text{ cm}^2$, P = 26 cm b) $A = 63 \text{ cm}^2$, P = 32 cm c) $A = 10 \text{ m}^2$, P = 14 m d) $A = 84 \text{ mm}^2$, P = 40 mm

e) $A = 9 \text{ m}^2$, P = 13.6 m f) $A = 12.16 \text{ cm}^2$, P = 14 cm

2. a) $A = 26 \text{ cm}^2\text{b}$) $A = 252 \text{ mm}^2$ c) $A = 1.12 \text{ m}^2$

3. a) $A = 72 \text{ cm}^2\text{b}$) $A = 222 \text{ cm}^2$ c) $A = 9.12 \text{ m}^2$