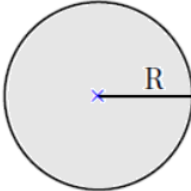
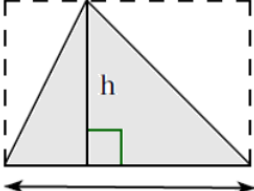
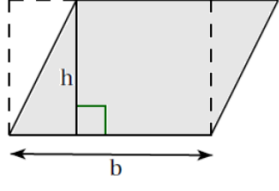


Calculs d'aires

I – Calcul d'aires élémentaires

Cercle	Rectangle	Triangle	Losange
			
$A = \pi R^2$	$A = a \times b$	$A = \frac{b \times h}{2}$	$A = b \times h$

Exemples : Calculer les aires des figures ci-dessous en cm^2 :

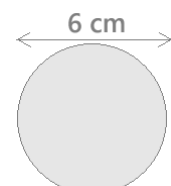
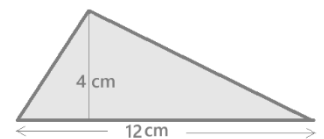
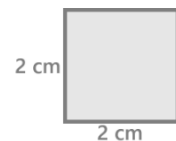
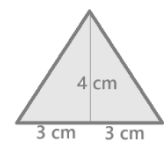
1) $A = 2 \times 6 = 12 \text{ cm}^2$

2) $A = \frac{6 \times 4}{2} = 12 \text{ cm}^2$

3) $A = 2 \times 2 = 4 \text{ cm}^2$

4) $A = \frac{12 \times 4}{2} = 24 \text{ cm}^2$

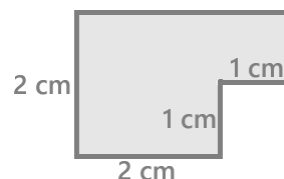
5) $A = \pi \times 3^2 \approx 28,3 \text{ cm}^2$



II – calculs d'aires composées

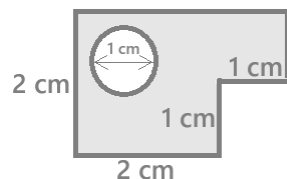
Calculer les aires en gris des figures ci-dessous en cm^2 :

1) $A = 2 \times 2 + 1 \times 1 = 5 \text{ cm}^2$



2) Aire du disque: $\pi \times 0,5^2 \approx 0,79$

$A = 5 - 0,79 = 4,21 \text{ cm}^2$



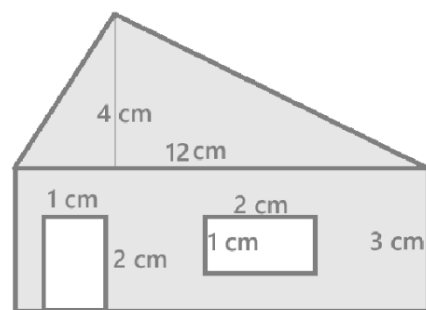
3) Toit: $A_1 = \frac{4 \times 12}{2} = 24 \text{ cm}^2$

Porte: $A_2 = 1 \times 2 = 2 \text{ cm}^2$

Porte: $A_3 = 1 \times 2 = 2 \text{ cm}^2$

Fenêtre: $A_4 = 2 \times 1 = 2 \text{ cm}^2$

$A = A_1 + A_2 - A_3 - A_4 = 24 + 36 - 2 - 2 = 56 \text{ cm}^2$



III – Les unités

Les principales unités utilisées pour mesurer les aires sont le m^2 et ses sous unités :

mm^2

cm^2

dm^2

dam^2

hm^2

km^2

on utilise parfois l'hectare : ha .