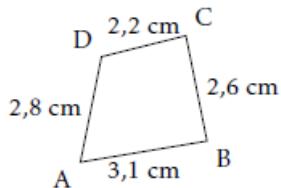


I. Périmètre d'une figure

Déf1 : Le périmètre d'une figure est la mesure de son contour.

Ex1 :

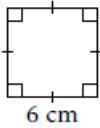


$$P = 3,1 + 2,6 + 2,2 + 2,8 = 10,7 \text{ cm}$$

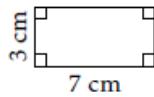
Périmètre des figures usuelles à connaître par cœur :

Carré	Rectangle	Triangle	Disque
$P = 4 \times c$	$P = 2 \times (L + l)$ $P = 2 \times L + 2 \times l$	$P = a + b + c$	$P = 2 \times \pi \times r$ $P = \pi \times d$ $\pi \approx 3,14$

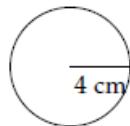
Ex2 :



$$P = 4 \times 6 = 24 \text{ cm}$$



$$P = 2 \times 3 + 2 \times 7 = 6 + 14 = 20 \text{ cm}$$



$$P = 2 \times \pi \times 4 \approx 25,12 \text{ cm}$$

Convertir des unités de périmètre :

Ex :

- $21 \text{ m} = 210 \text{ dm}$
- $5 \text{ hm} = 0,5 \text{ km}$
- $0,256 \text{ dam} = 25,6 \text{ cm}$
- $5,4 \text{ dm} = 0,0054 \text{ hm}$

$\times 10$					
km	hm	dam	m	dm	cm

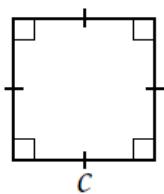
$\div 10$					
mm	dm	dam	hm	km	

II. Aire d'une figure

Déf2 : L'aire d'une figure est la mesure de sa surface

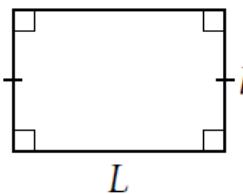
Aire des figures usuelles à connaître par cœur :

Carré



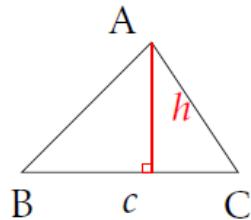
$$A = c \times c$$

Rectangle



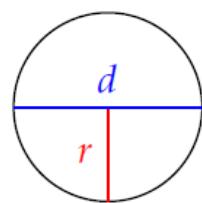
$$A = L \times l$$

Triangle



$$A = \frac{c \times h}{2}$$

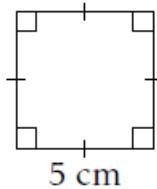
Disque



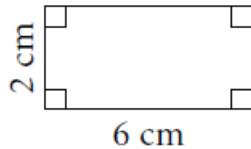
$$A = \pi \times r \times r$$

$$A = \pi \times r^2$$

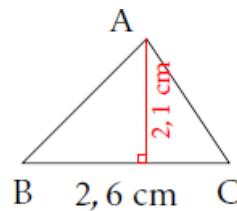
Ex :



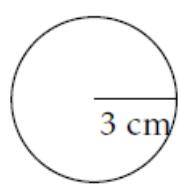
$$A = 5 \times 5 = 25 \text{ cm}^2$$



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



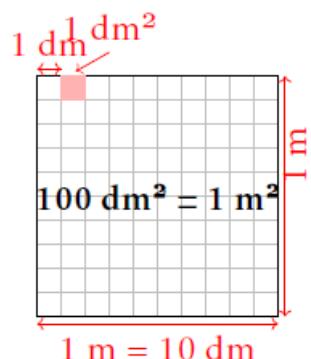
$$A = \frac{2,6 \times 2,1}{2} = \frac{5,46}{2} = 2,73$$



$$A = \pi \times 3^2 \approx 28,27 \text{ cm}^2$$

Convertir des unités d'aire :

Ce carré de côté 1 m (1 m^2) contient 100 carrés de côté 1 dm (100 dm^2).
On a alors : $1 \text{ m}^2 = 100 \text{ dm}^2$.



Ex :

- $21 \text{ m}^2 = 2100 \text{ dm}^2$
- $5 \text{ hm}^2 = 0,05 \text{ km}^2$
- $0,256 \text{ dam}^2 = 25600 \text{ cm}^2$
- $5,4 \text{ dm}^2 = 0,0000054 \text{ hm}^2$

$\times 100$	$\times 100$	$\times 100$	$\times 100$	$\times 100$	$\times 100$
km^2	hm^2	dam^2	m^2	dm^2	cm^2
					mm^2

| $\div 100$ |
|------------|------------|------------|------------|------------|------------|
| | | | | | |