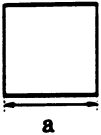
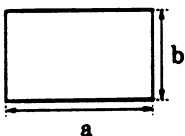
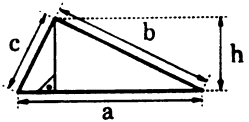
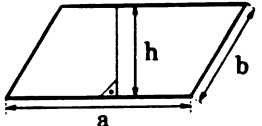
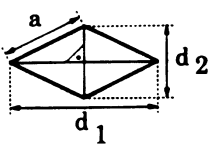
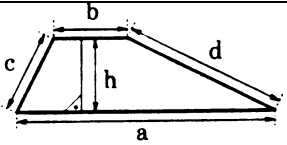
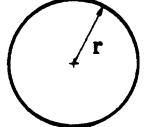


SERIE 42 – Géométrie

Périmètres & Aires (Surfaces)

calculatrice autorisée

Figure :	Nom de la figure :	Périmètre :	Aire :
	Carré	$P = 4a$	$A = a^2$
	Rectangle	$P = 2a + 2b = 2 \cdot (a + b)$	$A = a \cdot b$
	Triangle	$P = a + b + c$	$A = \frac{a \cdot h}{2}$
	Parallélogramme	$P = 2a + 2b = 2 \cdot (a + b)$	$A = a \cdot h$
	Losange	$P = 4a$	$A = \frac{d_1 \cdot d_2}{2}$
	Trapèze	$P = a + d + b + c$	$A = \frac{(a + b) \cdot h}{2}$
	Cercle / Disque	$P = 2 \cdot \pi \cdot r$ $P = \pi \cdot d$	$A = \pi \cdot r^2$

Unités de longueur :

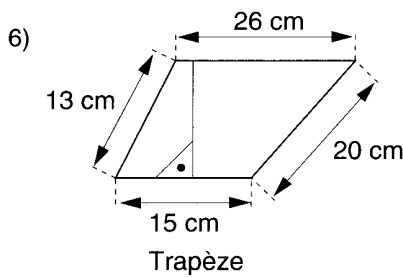
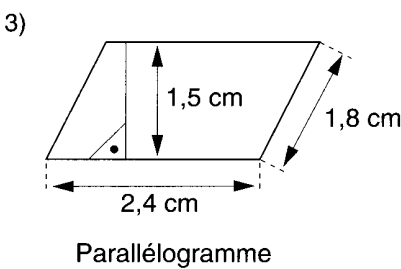
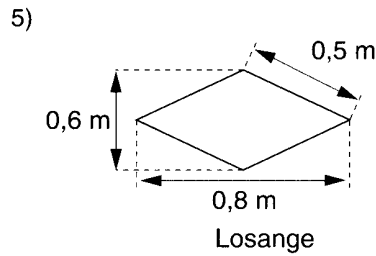
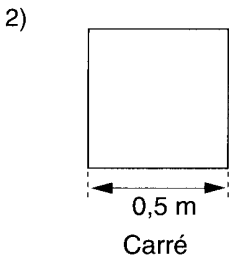
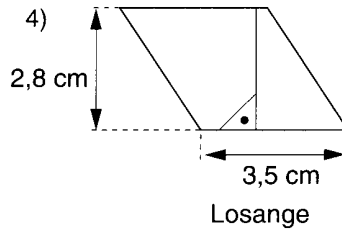
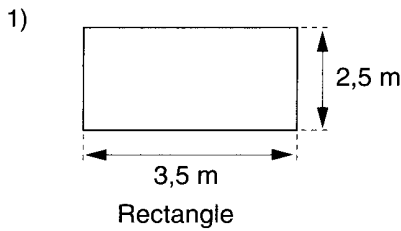
km	hm	dam	m	dm	cm	mm
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Unités d'aire (surface) :

km ²	hm ²	dam ²	m ²	dm ²	cm ²	mm ²
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Exercice 1 :

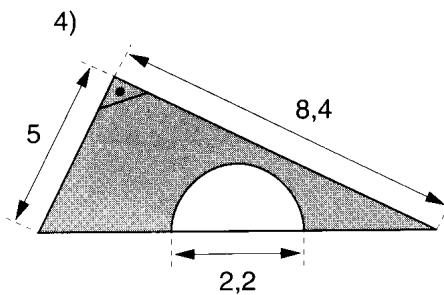
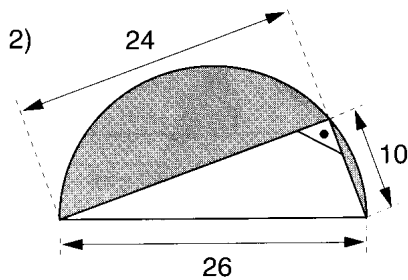
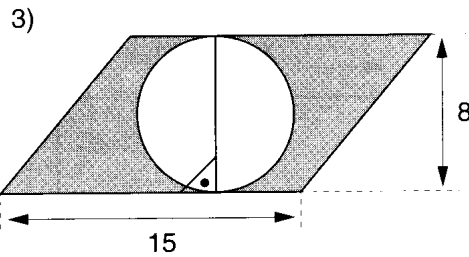
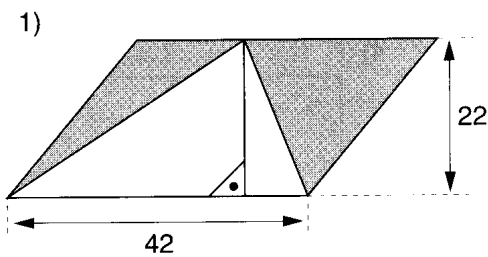
Calculer le périmètre et l'aire de chacune de ces figures :



Exercice 2 :

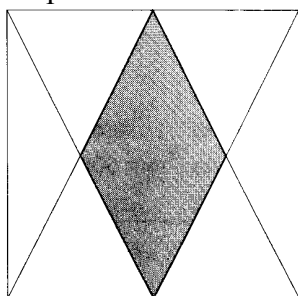
Calculer l'aire de chacune des surfaces ombrées.

Unité de longueur : le cm



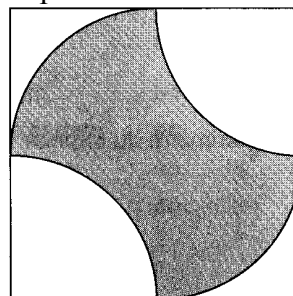
Exercice 3 :

1) Le périmètre du carré est de 32 cm.



Calculer l'aire de la surface ombrée

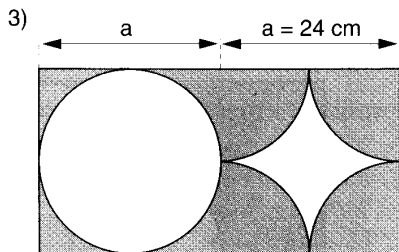
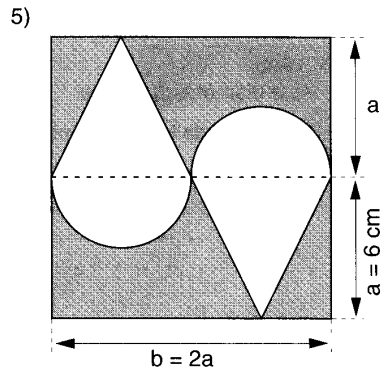
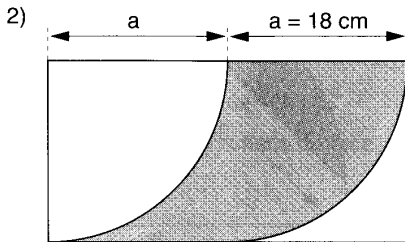
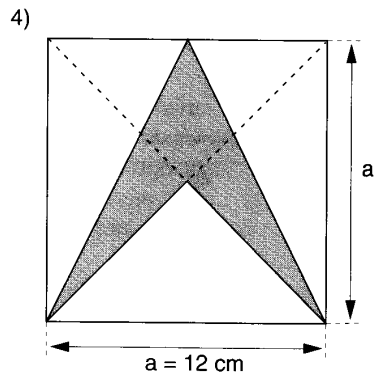
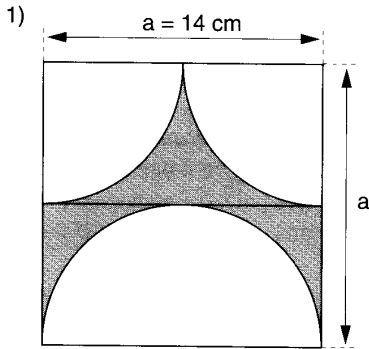
2) Le périmètre de la surface ombrée est de 18,84 cm



Calculer l'aire de la surface ombrée

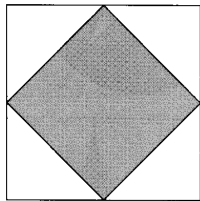
Exercice 4 :

Calculer l'aire de chacune des surfaces ombrées.

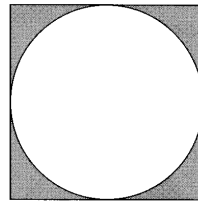


Exercice 5 :

1) L'aire du carré ombré est de 18 cm^2 .
Calculer le périmètre du grand carré.



2) L'aire du disque est de $28,26 \text{ cm}^2$.
Calculer l'aire de la surface ombrée.



Exercice 6* :

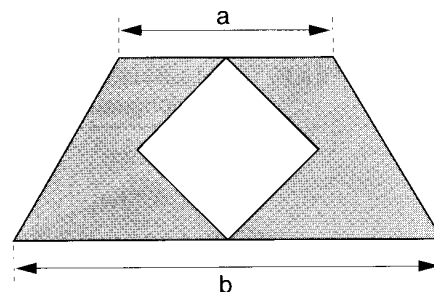
La figure blanche est un carré.

$a = 11 \text{ cm}$

$b = 25 \text{ cm}$

L'aire du trapèze est de 108 cm^2 .

Calculer l'aire du trapèze de la surface ombrée.

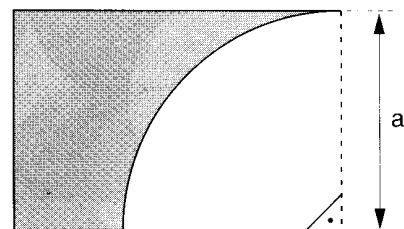


Exercice 7* :

Le périmètre de la figure ombrée ci-contre mesure $34,5 \text{ dm}$.

Le rayon a mesure 8 dm .

Calculer l'aire de la figure ombrée.



Solutions :

Ex 1 :

- 1) $P = 12\text{ m} ; A = 8,75\text{ m}^2$
- 2) $P = 2\text{ m} ; A = 0,25\text{ m}^2$
- 3) $P = 8,4\text{ cm} ; A = 3,6\text{ cm}^2$
- 4) $P = 14\text{ cm} ; A = 9,8\text{ cm}^2$
- 5) $P = 2\text{ m} ; A = 0,24\text{ m}^2$
- 6) $P = 74\text{ cm} ;$ l'aire est indéterminée (hauteur inconnue)

Ex 2 :

- 1) $A = 924 - 462 = 462\text{ cm}^2$
- 2) $A = 265,33 - 120 = 145,33\text{ cm}^2$
- 3) $A = 120 - 50,24 = 69,76\text{ cm}^2$
- 4) $A = 21 - 1,8997 = 19,1003\text{ cm}^2$

Ex 3 :

- 1) $A = 16\text{ cm}^2$
- 2) $A = 18\text{ cm}^2$

Ex 4 :

- 1) $A = 196 - 153,86 = 42,14\text{ cm}^2$
- 2) $A = 18^2 = 324\text{ cm}^2$
- 3) $A = 24^2 = 576\text{ cm}^2$
- 4) $A = 144 - 108 = 36\text{ cm}^2$
- 5) $A = 144 - (28,26 + 36) = 79,74\text{ cm}^2$

Ex 5 :

- 1) $P = 4 \cdot 6 = 24\text{ cm}$
- 2) $A = 81 - 28,26 = 52,74\text{ cm}^2$

Ex 6 :

$$h = 6$$
$$A = 108 - 18 = 90\text{ cm}^2$$

Ex 7 :

$$A = 62,64\text{ dm}^2$$