

**SERIE 41 – 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 :**

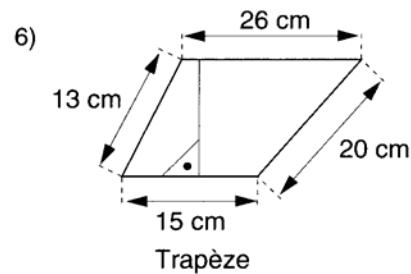
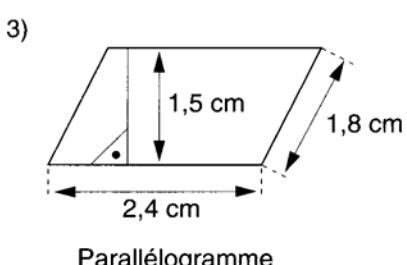
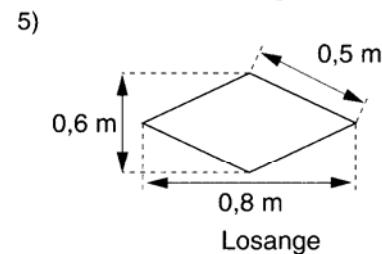
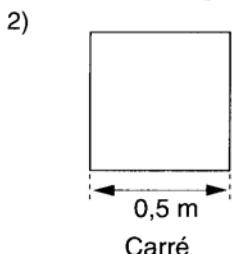
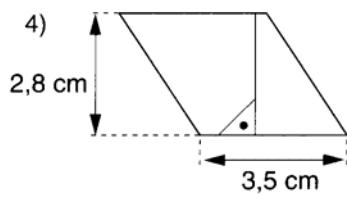
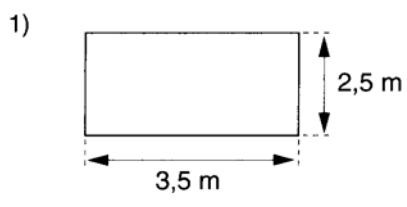
km	hm	dam	m	dm	cm	mm
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**Unités d'aire (surface) :**

km <sup>2</sup>	hm <sup>2</sup>	dam <sup>2</sup>	m <sup>2</sup>	dm <sup>2</sup>	cm <sup>2</sup>	mm <sup>2</sup>
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**Exercice 1 :**

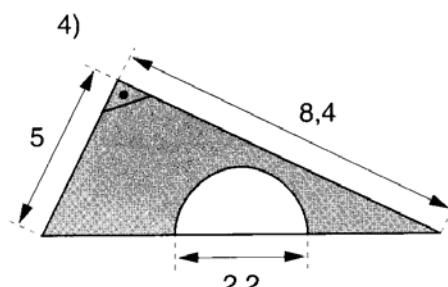
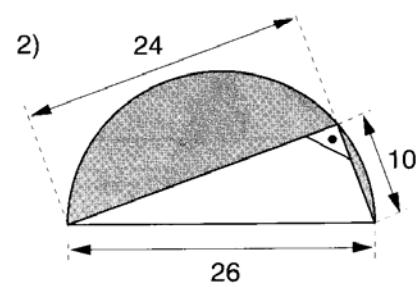
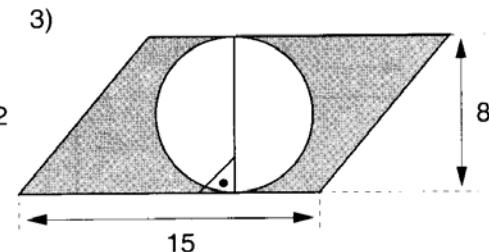
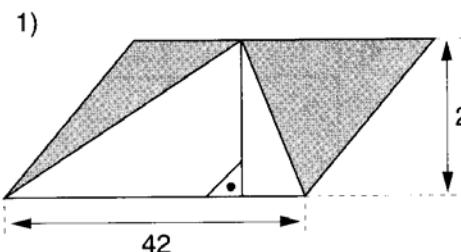
Calculer le périmètre et l'aire de chacune de ces figures :



### Exercice 2 :

Calculer l'aire de chacune des surfaces ombrées.

Unité de longueur : le cm



### 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)  $P = 74 \text{ cm} ; \text{l'aire est indéterminée (hauteur inconnue)}$

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)  $A = 21 - 1,8997 = 19,1003 \text{ cm}^2$