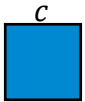
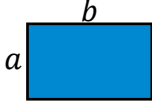
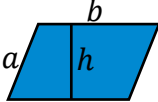
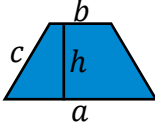
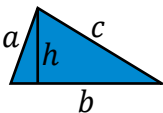




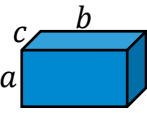

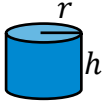




Test 4	Aires et volumes
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Formules pour calculer le périmètre P et l'aire A des principales figures planes :

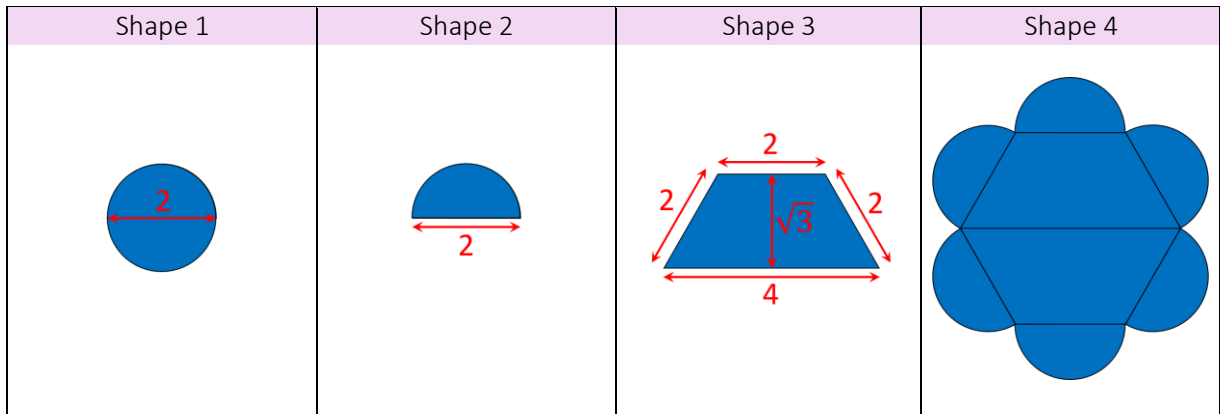
carré	rectangle	parallélogramme	trapèze isocèle	triangle	cercle
					
$P = 4c$	$P = 2a + 2b$	$P = 2a + 2b$	$P = a + b + 2c$	$P = a + b + c$	$P = 2\pi r$
$A = c^2$	$A = ab$	$A = bh$	$A = \frac{a+b}{2}h$	$A = \frac{bh}{2}$	$A = \pi r^2$

Formules pour calculer la surface S et le volume V des principaux solides :

cube	parallélépipède	tétraèdre	cylindre	cône	sphère
					
$S = 6c^2$	$S = 2(ab + bc + ac)$	$S = \sqrt{3}c^2$	$S = 2\pi(rh + r^2)$	$S = \frac{\pi r^2}{\sin \alpha}$	$S = 4\pi r^2$
$V = c^3$	$V = abc$	$V = \frac{\sqrt{2}}{12}c^3$	$V = \pi r^2 h$	$V = \frac{\pi r^2 h}{3}$	$V = \frac{4}{3}\pi r^3$

Exercice 1 (7 points)

- | | |
|--|--|
| a) What is the area of a square whose side is 4? | |
| b) What is the perimeter of a rectangle whose sides are 3 and 7? | |
| c) What is the volume of a sphere whose radius is 5? | |
| d) What is the surface of a cube whose side is 2? | |
| e) What is the perimeter of a circle whose radius is 6? | |
| f) What is the area of a circle whose diameter is 8? | |
| g) What is the volume of a tetrahedron whose side is 3? | |



Exercise 2 (10 points)

a) **Shape 1** is a circle whose diameter is 2. What is its radius?

b) What is the area of **shape 1**?

c) What is the perimeter of **shape 1**?

d) Is it true that the perimeter of **shape 1** is twice its area?

e) **Shape 2** is a half circle whose diameter is 2. What is its area?

f) What is the perimeter of **shape 2**?

g) **Shape 3** is a trapezoid. What is its area?

h) What is the perimeter of **shape 3**?

i) **Shape 4** is a combination of shapes 2 & 3. What is its area?

j) What is the perimeter of **shape 4**?

Exercise 3 (3 points) True or false?

a) Two shapes with the same area have always the same perimeter.

b) The area of a shape is always smaller than its perimeter.

c) If the radius of a circle is a round number, the area of this circle is not a round number.

True	False
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>