

Feuille de formules

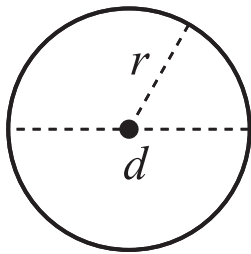
Test de mathématiques, 9^e année

Figure plane

Périmètre

Aire

Cercle



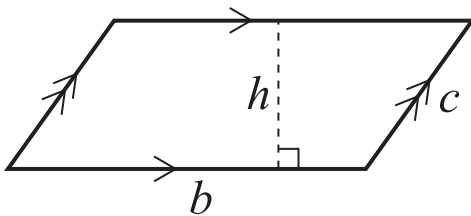
$$C = \pi d$$

ou

$$C = 2\pi r$$

$$A = \pi r^2$$

Parallélogramme



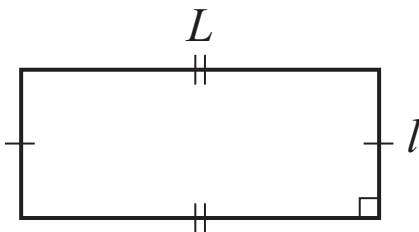
$$P = b + b + c + c$$

ou

$$P = 2(b + c)$$

$$A = bh$$

Rectangle

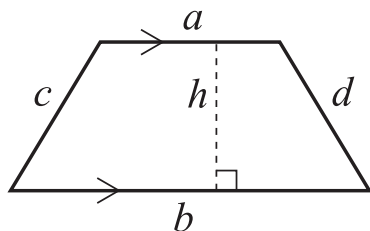


$$P = L + L + l + l$$

ou

$$P = 2(L + l)$$

$$A = Ll$$

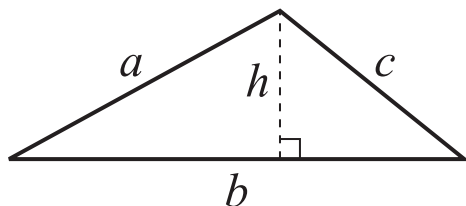
Figure plane**Périmètre****Aire****Trapèze**

$$P = a + b + c + d$$

$$A = \frac{(a + b)h}{2}$$

ou

$$A = \frac{1}{2} (a + b)h$$

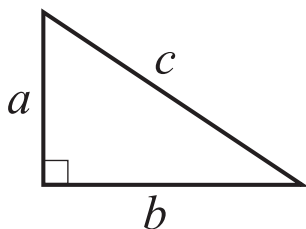
Triangle

$$P = a + b + c$$

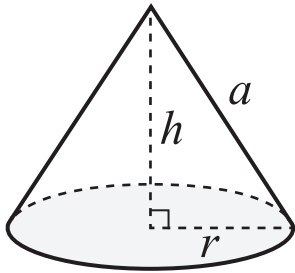
$$A = \frac{bh}{2}$$

ou

$$A = \frac{1}{2} bh$$

Formule supplémentaire**Triangle rectangle****Relation de longueur des côtés
des triangles rectangles**

$$a^2 + b^2 = c^2$$

Solide**Aire****Volume****Cône**

$$A_{\text{base}} = \pi r^2$$

$$A_{\text{surface latérale}} = \pi r a$$

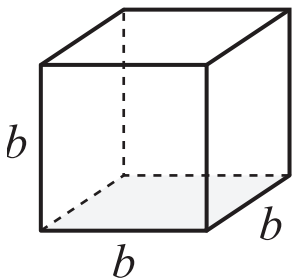
$$A_{\text{totale}} = A_{\text{base}} + A_{\text{surface latérale}} \\ = \pi r^2 + \pi r a$$

$$V = \frac{(A_{\text{base}})(\text{hauteur})}{3}$$

$$V = \frac{\pi r^2 h}{3}$$

ou

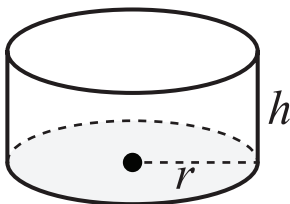
$$V = \frac{1}{3} \pi r^2 h$$

Cube

$$A = 6b^2$$

$$V = (A_{\text{base}})(\text{hauteur})$$

$$V = b^3$$

Cylindre

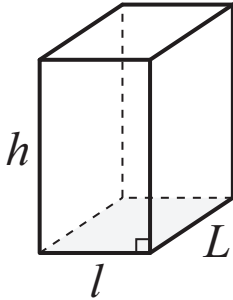
$$A_{\text{base}} = \pi r^2$$

$$A_{\text{surface latérale}} = 2\pi r h$$

$$A_{\text{totale}} = 2A_{\text{base}} + A_{\text{surface latérale}} \\ = 2\pi r^2 + 2\pi r h$$

$$V = (A_{\text{base}})(\text{hauteur})$$

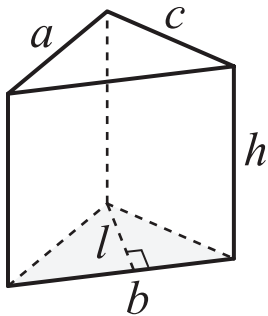
$$V = \pi r^2 h$$

Solide**Aire****Volume****Prisme à base rectangulaire**

$$A = 2(Lh + lL + hl)$$

$$V = (A_{\text{base}})(\text{hauteur})$$

$$V = Llh$$

Prisme à base triangulaire

$$A_{\text{base}} = \frac{bl}{2}$$

$$A_{\text{rectangles}} = ah + bh + ch$$

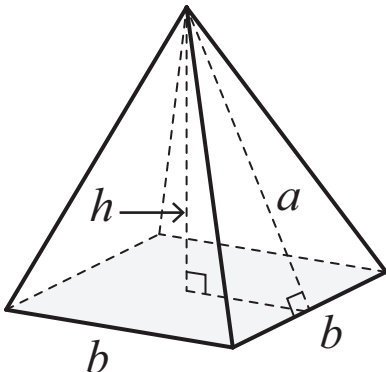
$$A_{\text{totale}} = 2A_{\text{base}} + A_{\text{rectangles}}$$
$$= bl + ah + bh + ch$$

$$V = (A_{\text{base}})(\text{hauteur})$$

$$V = \frac{blh}{2}$$

ou

$$V = \frac{1}{2} blh$$

Pyramide à base carrée

$$A_{\text{base}} = b^2$$

$$A_{\text{triangle}} = \frac{ba}{2}$$

$$A_{\text{totale}} = A_{\text{base}} + 4A_{\text{triangle}}$$
$$= b^2 + 2ba$$

$$V = \frac{(A_{\text{base}})(\text{hauteur})}{3}$$

$$V = \frac{b^2h}{3}$$

ou

$$V = \frac{1}{3} b^2h$$