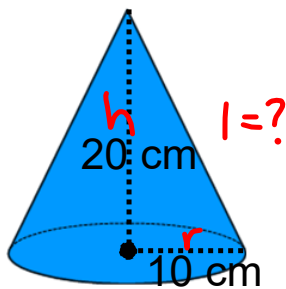


Trouve l'aire de la surface:

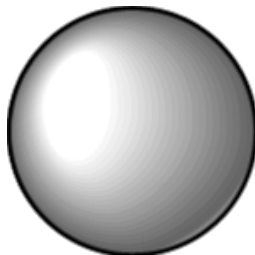
1) cône

$$\begin{aligned} a^2 + b^2 &= c^2 \\ 20^2 + 10^2 &= c^2 \\ 400 + 100 &= c^2 \\ \sqrt{500} &= \sqrt{c^2} \\ c &= 22,4 \end{aligned}$$



$$\begin{aligned} A &= \pi r^2 + \pi r l \\ &= \pi (10)^2 + \pi (10)(22,4) \\ &= 314,16 + 702,46 \\ &= 1016,6 \text{ cm}^2 \end{aligned}$$

2) sphère



d = 15 mm

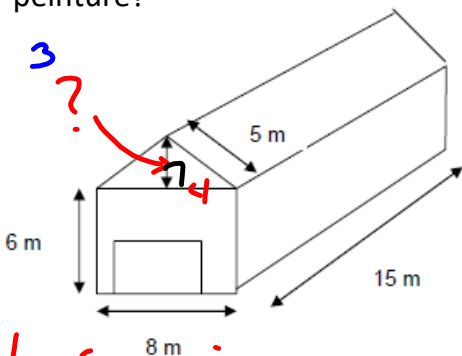
$$r = 7,5$$

$$\begin{aligned} A &= 4\pi r^2 \\ &= 4\pi (7,5)^2 \\ &= 706,9 \text{ mm}^2 \end{aligned}$$

2. Une boîte de craquelins Christie mesure 12cm par 10cm par 23cm. Combien de carton faut-il pour couvrir la boîte

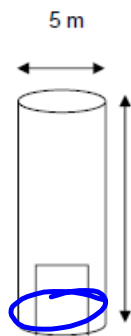
3. Patti veut couvrir la balle de ballon panier de Issac avec de nouveau cuir (leather). Quel est le montant minimum du cuir qu'elle aurait besoin de si le diamètre est 28 cm?

4. Tu veux peindre la ferme (oui, les toits et les portes aussi). Un contenant de peinture couvre 40m². Si un contenant de peinture coût 50\$, quel est le coût total du peinture?



La Grange:

A/D: 96m² 2△: 24m²
 côtés: 180m²
 toit: 150m²



le silo: pas 2πr²

$$A = \pi r^2 + 2\pi r h$$

$$= 239,5 \text{ m}^2$$

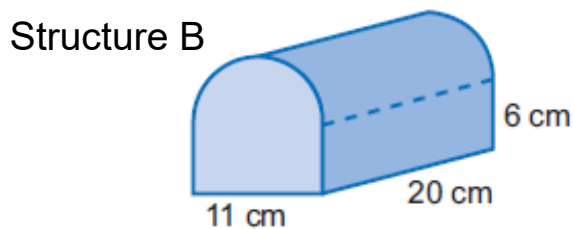
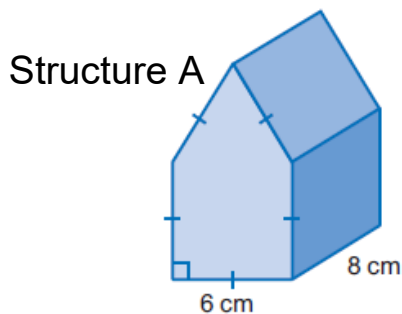
$$\pi(2,5)^2 + 2\pi(2,5)(14)$$

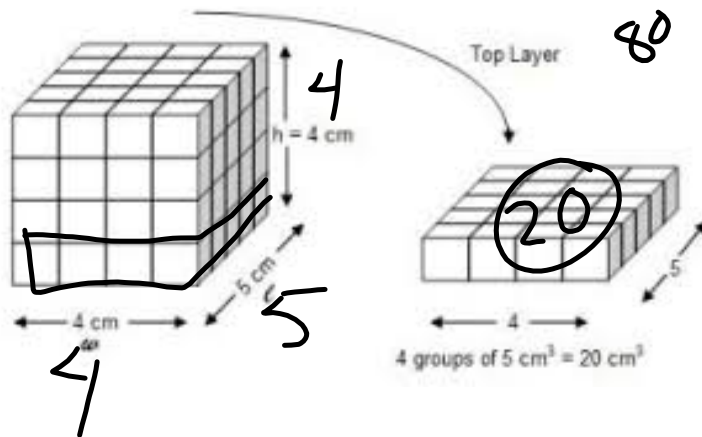
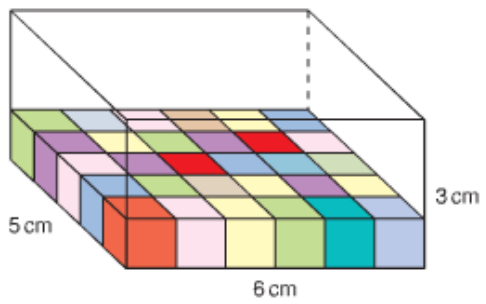
$$19,6 + 219,9$$

$$239,5$$

Rep: 689,5m²
 -40m²
 = 17,2
 18 x 50\$
 900\$

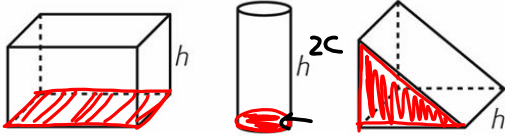
5. Quelle structure aura besoin de plus de peinture pour le couvrir (tous les côtés)?





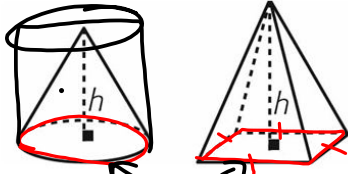
Volume

Prismes (et cylindres)



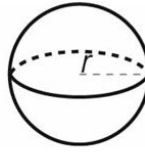
$$V = A_{\text{base}} \cdot h$$

Pyramides (et cônes)



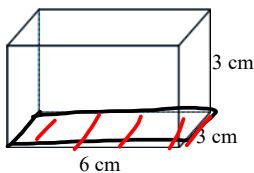
$$V = \frac{A_{\text{base}} \cdot h}{3}$$

Sphères

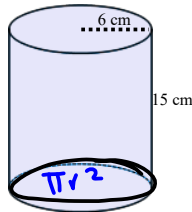


$$V = \frac{4\pi r^3}{3}$$

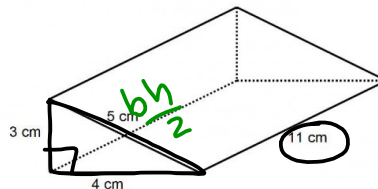
Exemples:



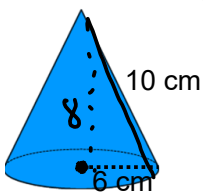
$$\begin{aligned} V &= A_{\text{base}} \cdot h \\ &= bh \cdot h \\ &= (6)(3)(3) \\ &= 54 \text{ cm}^3 \end{aligned}$$



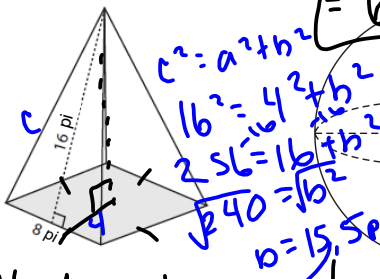
$$\begin{aligned} V &= A_{\text{base}} \cdot h \\ &= \pi r^2 \cdot h \\ &= \pi(6)^2(15) \\ &= 1696,5 \text{ cm}^3 \end{aligned}$$



$$\begin{aligned} V &= A_{\text{base}} \cdot h \\ &= \frac{bh}{2} \cdot h \\ &= \frac{(3)(4)}{2} \cdot 11 \\ &= 66 \text{ cm}^3 \end{aligned}$$

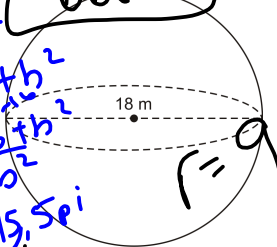


$$\begin{aligned} V &= \frac{A_{\text{base}} \cdot h}{3} \\ &= \frac{\pi r^2 \cdot h}{3} \\ &= \frac{\pi(6)^2 \cdot 8}{3} \\ &= 301,6 \text{ cm}^3 \end{aligned}$$



$$\begin{aligned} V &= \frac{A_{\text{base}} \cdot h}{3} \\ &= \frac{bh \cdot h}{3} \\ &= \frac{(8)(8)(15,5)}{3} \\ &= 330,5 \text{ pi}^3 \end{aligned}$$

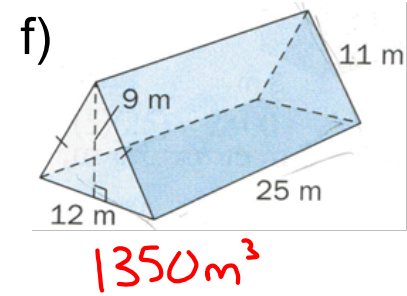
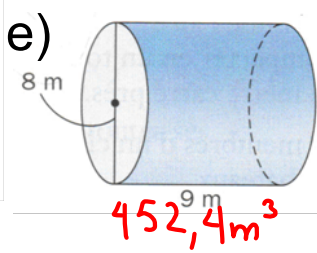
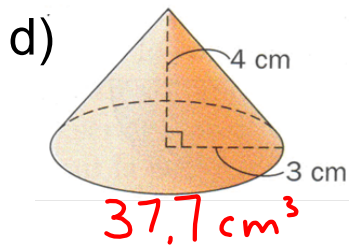
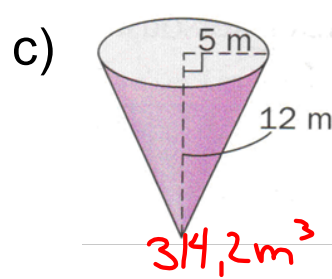
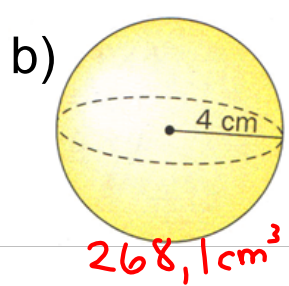
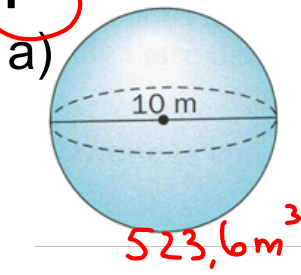
Handwritten notes:
 $c^2 = a^2 + b^2$
 $16^2 = 4^2 + h^2$
 $256 = 16 + h^2$
 $\sqrt{40} = \sqrt{h^2}$
 $h = 15,5 \text{ pi}$



$$\begin{aligned} V &= \frac{4\pi r^3}{3} \\ &= \frac{4\pi(9)^3}{3} \\ &= 3053,6 \text{ m}^3 \end{aligned}$$

Pratique: Calcule le volume

1



2

