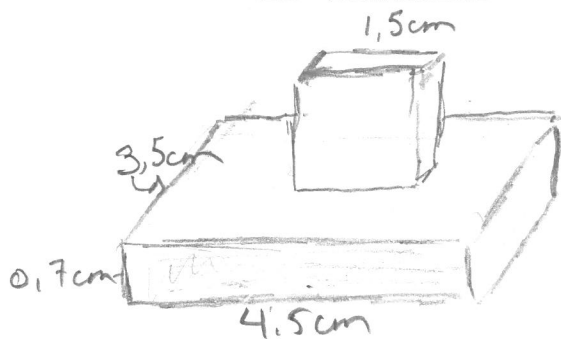


# 1.3 L'aire de la surfaces d'objets

Le 9 février,  
2016



Trouve l'aire.

À considérer :

- le montant de forme(s) géométrique(s)  
↳ (2) prisme et cube
- les dimensions ✓
- les chevauchements

Surfaces prisme

$$\begin{aligned} A &= 2Ll + 2Ll + 2Ll \\ &= 2(0.7\text{cm})(4.5\text{cm}) + (2)(0.7\text{cm})(3.5\text{cm}) + (2)(3.5\text{cm})(4.5\text{cm}) \\ &= 6.3\text{cm}^2 + 4.9\text{cm}^2 + 31.5\text{cm}^2 \\ &= 42.7\text{cm}^2 \end{aligned}$$

Surface cube

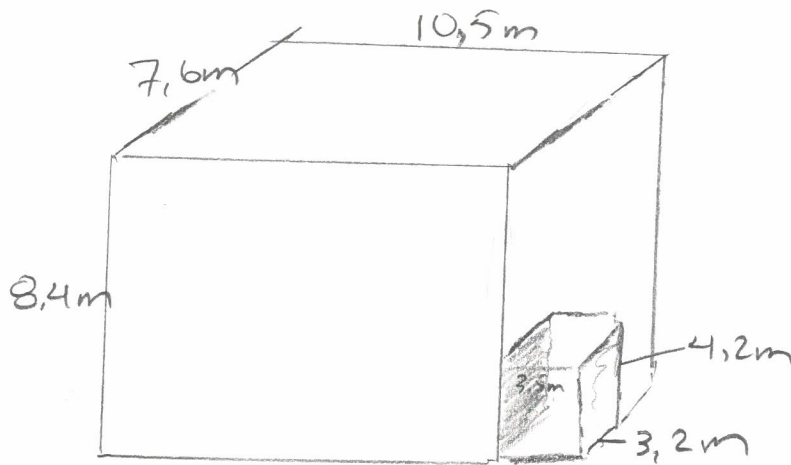
$$\begin{aligned} A &= 6Ll \\ &= 6(1.5\text{cm})(1.5\text{cm}) \\ &= 13.5\text{cm}^2 \end{aligned}$$

$$\begin{aligned} A_{\text{tot}} &= 42.7\text{cm}^2 + 13.5\text{cm}^2 \\ &= 56.2\text{cm}^2 \end{aligned}$$

Il y a deux surfaces qui se chevauchent (dimensions de  $1.5\text{cm} \times 1.5\text{cm}$ )

$$\begin{aligned} A_{\text{tot}} &= 56.2\text{cm}^2 - (2)[(1.5\text{cm})(1.5\text{cm})] \\ &= 56.2\text{cm}^2 - (4.5\text{cm}^2) \\ &= 51.7\text{cm}^2 \end{aligned}$$

Ex 2:



Calcule la surface totale

$$A_{\text{totale}} = (A_{\text{GP}} + A_{\text{PP}}) - A_{\text{FC}}$$

$$A_{\text{GP}} = 2LL + 2LL + 2LL$$

$$= 2(8.4\text{m})(10.5\text{m}) + 2(7.6\text{m})(8.4\text{m}) + 2(10.5\text{m})(7.6\text{m})$$

$$= 176.4\text{m}^2 + 127.68\text{m}^2 + 159.6\text{m}^2$$

$$= 463.68\text{m}^2$$

$$A_{\text{PP}} = 2LL + 2LL + 2LL$$

$$= 2(3.2\text{m})(4.2\text{m}) + 2(3.5\text{m})(3.2\text{m}) + 2(3.5\text{m})(4.2\text{m})$$

$$= 26.88\text{m}^2 + 22.4\text{m}^2 + 29.4\text{m}^2$$

$$= 78.68\text{m}^2$$

$$A_{\text{tot}} = (A_{\text{GP}} + A_{\text{PP}}) - A_{\text{FC}}$$

$$= (463.68\text{m}^2 + 78.68\text{m}^2) - 2[(3.2\text{m})(4.2\text{m})]$$

$$= 542.36\text{m}^2 - 26.88\text{m}^2$$

$$= 515.48\text{m}^2$$