What's Going On?

Checking In

Minds on Whaddya know?

Action! The Formulae

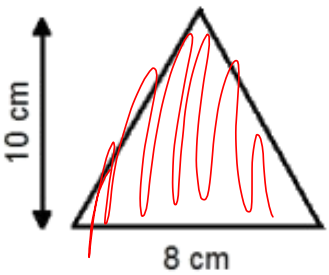
Consolidation Practice

Learning Goal - I will be able to calculate the volume of prisms, pyramids, cones and spheres.

Minds on

Whaddya Know?

How much paint would you need to paint the triangle?



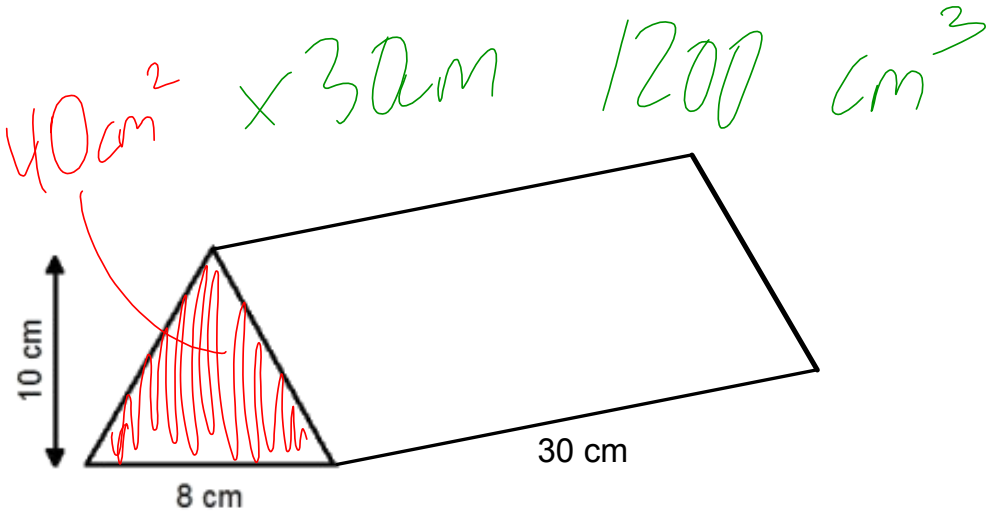
~~50 cm~~ ~~40 cm~~

~~50 cm²~~ 40 cm²

Minds on

Whaddya Know?

How much paint would you need to fill the triangular prism?

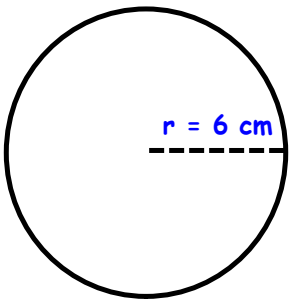


Minds on

Whaddya Know?

How much paint would you need to paint the circle?

$A = \pi r^2$

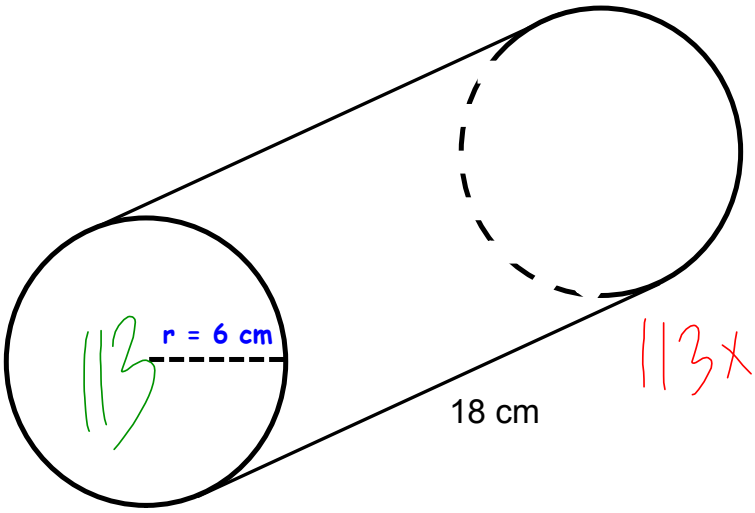


$\pi \times 36 = 113.0$ or 1

Minds on

Whaddya Know?

How much paint would you need to fill the cylinder?

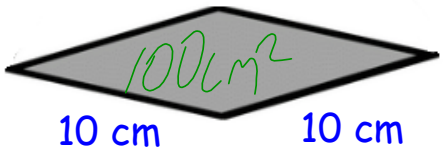


$113 \times 18 = 2034 cm^3$

Minds on

Whaddya Know?

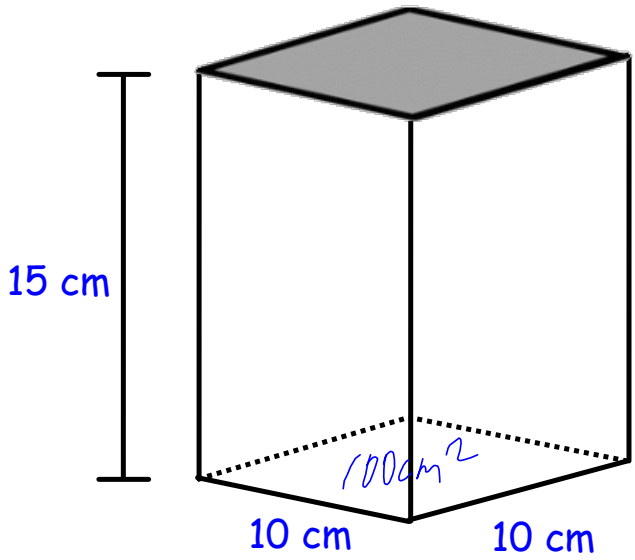
How much paint would you need to paint the square?



Minds on

Whaddya Know?

How much paint would you need to paint the square?

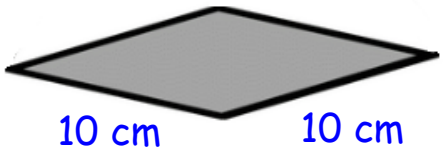


1500cm³

Minds on

Whaddya Know?

How much paint would you need to paint the square?

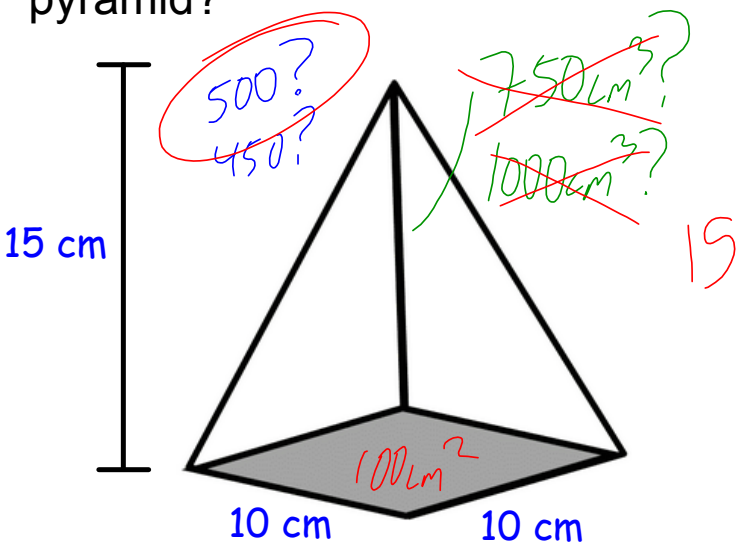


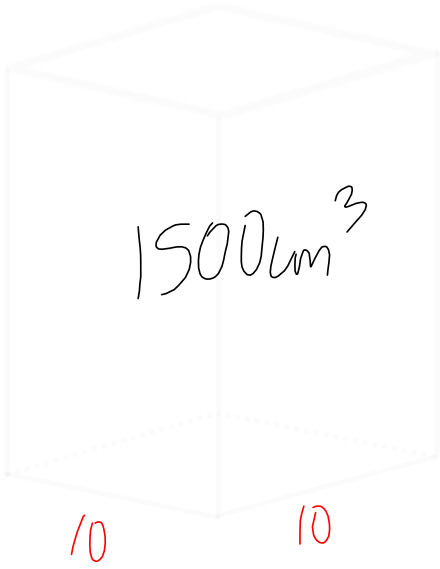
$100 cm^2$

Minds on

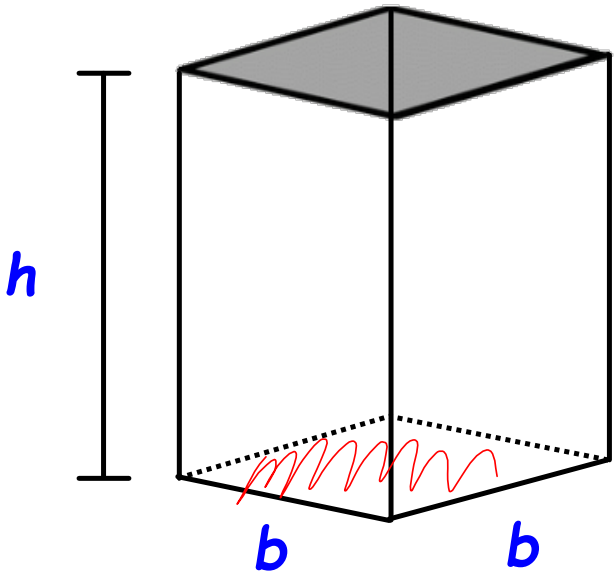
Whaddya Know?

How much paint would you need to fill the square-based pyramid?

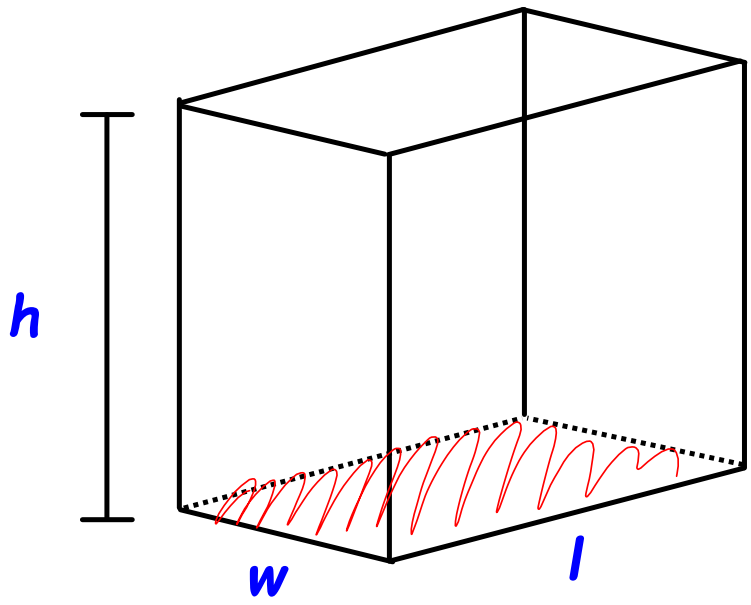




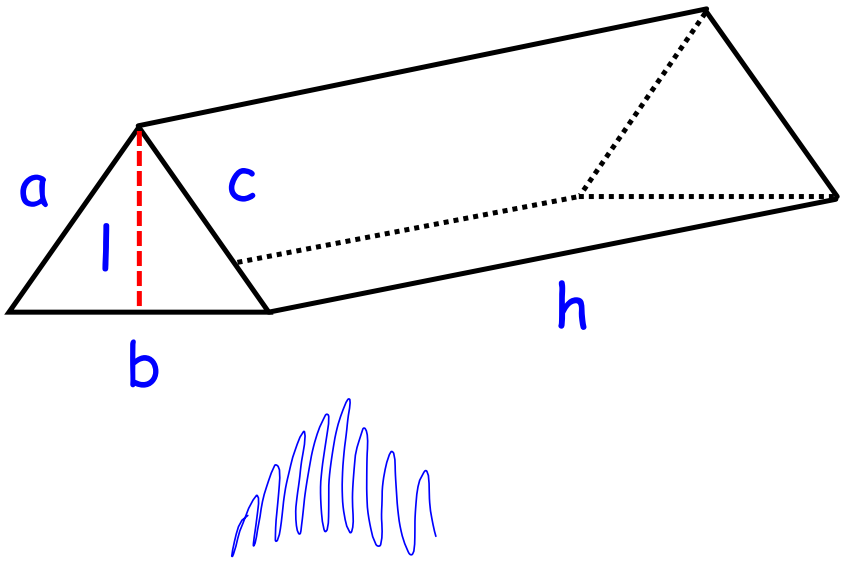
Square -based Prism



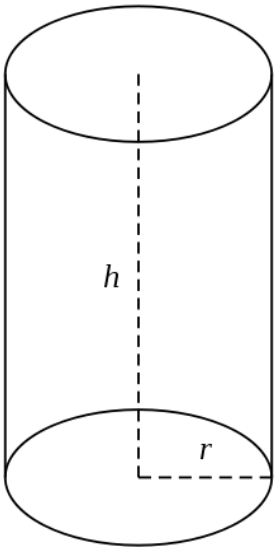
Rectangular -based Prism



Triangular -based Prism



Circular -based Prism??



A.K.A.
Cylinder

Action!

The Formulae

Volume of **ANY** Prism

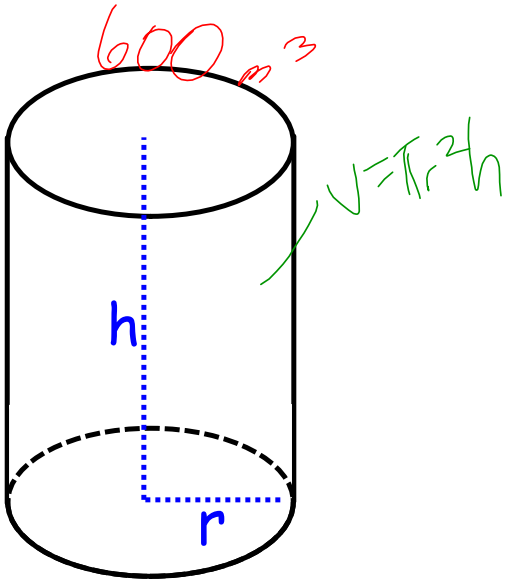
$$V = (A_{Base})(height)$$

Volume of a Pyramid

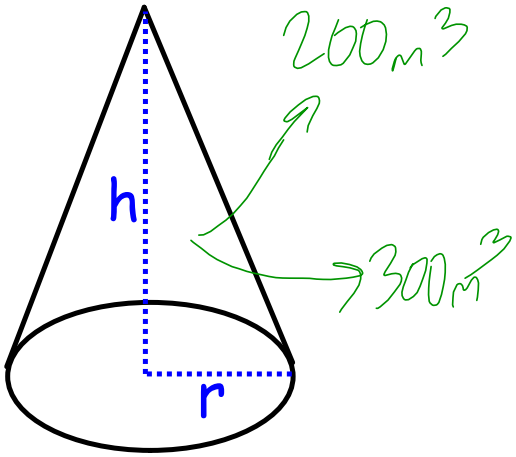
$$V = \frac{(A_{Base})(height)}{3}$$

Consolidation

Cones and Spheres



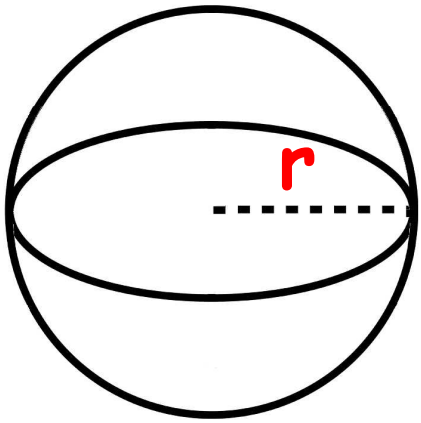
$V = \pi r^2 \times \text{height}$



$V = \frac{\pi r^2 \times \text{height}}{3}$

Consolidation

Cones and Spheres



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

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