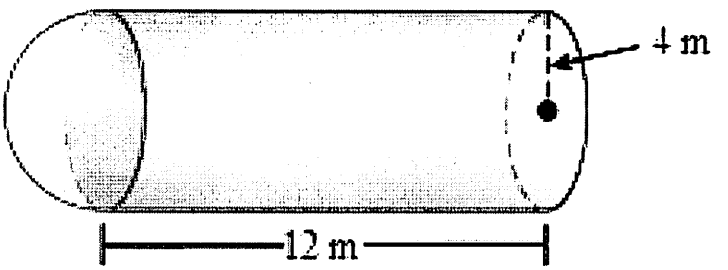
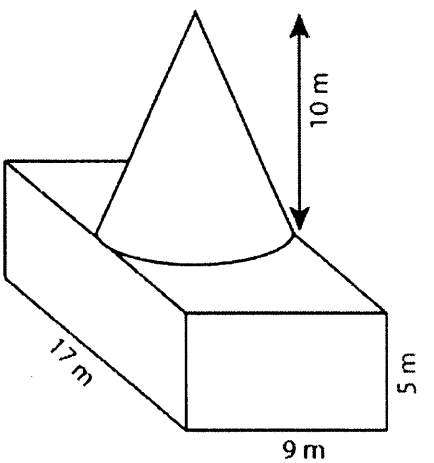
**I can calculate the Volume of Composite Figures**

# Volume of Composite Figures

Find the Volume of the Half-Sphere and Cylinder combination *in terms of* $\pi$




Find the Volume of the Cone and Rectangular Prism *to the nearest tenth of a cubic meter*



**I can calculate the Volume of Composite Figures**

# Volume of Composite Figures

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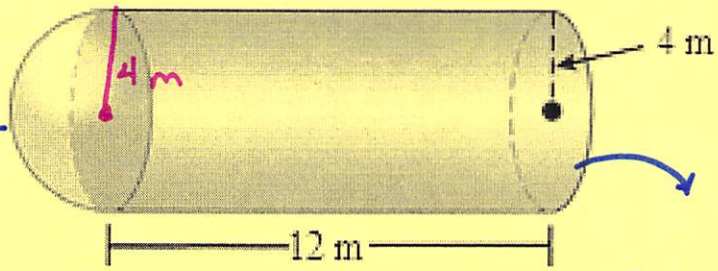



Half-Sphere

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

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

$V = 85.\overline{3}\,\pi$

$\div 2$

$V_{\frac{1}{2}SPH} = 42.\overline{6}\,\pi \text{ m}^3$

Cylinder

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

$V = \pi \cdot 4^2 \cdot 12$

$V = 192\pi \text{ m}^3$

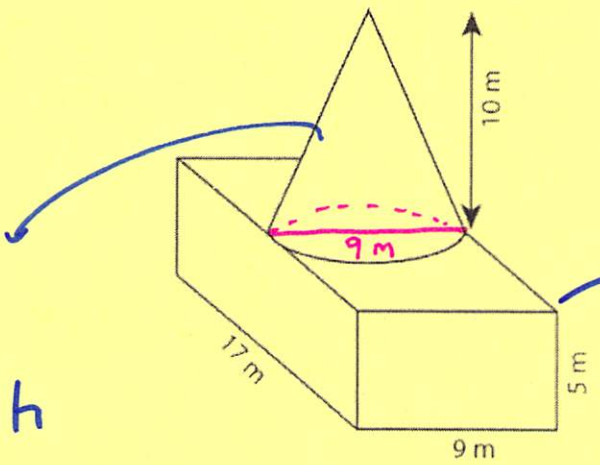
Total Volume

$234.\overline{6}\,\pi \text{ m}^3$

Find the Volume of the Cone and Rectangular Prism *to the nearest tenth of a cubic meter*

$r = 4.5$ m

$h = 10$ m




Cone

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

$V = \frac{1}{3} \cdot \pi \cdot (4.5)^2 \cdot 10$

$V = 212.1 \text{ m}^3$

RP

$V = L \times W \times H$

$V = 17 \cdot 9 \cdot 5$

$V = 765 \text{ m}^3$

Total Volume:

$977.1 \text{ m}^3$