

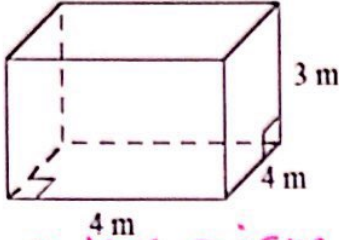
# GUIDED NOTES: Volume

$$V = lwh$$

$$V = Bh$$

Volume - the amount of one shape stacked up inside of a 3D figure

EX1.

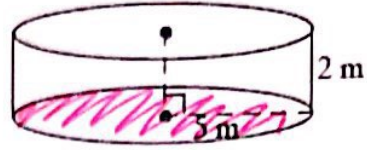


rectangular prism

$$V = 4 \cdot 4 \cdot 3$$

$$V = 48 \text{ m}^3$$

EX2.

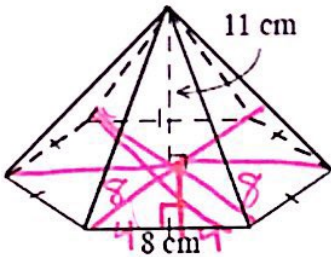


cylinder

$$V = (\pi 5^2) 2$$

$$V = 157.08 \text{ m}^3$$

EX3



hexagonal pyramid

pythagorean theorem

$$4^2 + b^2 = 8^2$$

$$b = 6.93$$

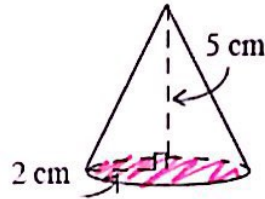
$$V = \left[ \frac{8(6.93)}{2} \cdot 6 \right] \cdot 11$$

3 ← for all

pyramids

$$V = 609.66 \text{ cm}^3$$

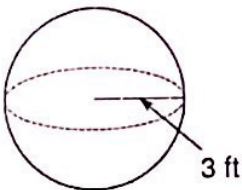
EX4.



$$V = \frac{(\pi 2^2) 5}{3}$$

$$V = 20.94 \text{ cm}^3$$

EX5.



$$\text{sphere} = \frac{4\pi r^3}{3} = \frac{4\pi 3^3}{3}$$

$$V = 113.09 \text{ ft}^3$$