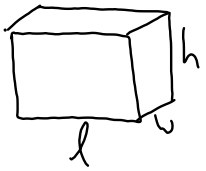
1. 19.97
2. 84.83
3. 32.6
4. 16.1
5. 153.88
6. 254.41

Notes April 25

Ch 3.2 - Volume.

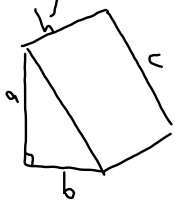
The Volume of all Prisms is Area of Base x Height

Rectangular Prism



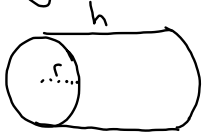
$V = l \cdot w \cdot h$

Triangular Prism



$V = \frac{a \cdot b \cdot h}{2}$

Cylinder



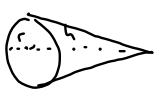
$V = \pi \cdot r^2 \cdot h$

VOLUME OF Pyramid is always $\frac{\text{Area of Base} \times \text{Height}}{3}$

Square Base Pyramid

$V = \frac{b^2 \cdot h}{3}$

Cone



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

Converting Cubic Units

Convert $5\ m^3$ into cubic feet

$$5\,m^3 \times \frac{1^3\ ft^3}{.3048^3\ m^3}$$

$$176.6\ ft^3$$

$1\,000\,000\ in^3$ into m^3

$$1\,000\,000\,in^3 \times \frac{2.54^3\ cm^3}{1^3\ in^3} \times \frac{1^3\ m^3}{100^3\ cm^3}$$

$$16.4\ m^3$$