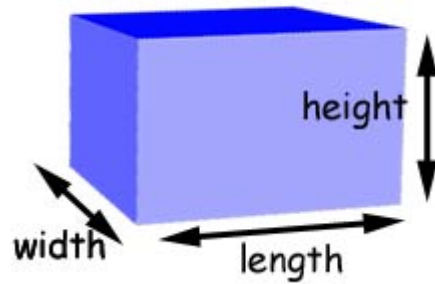


Cuboid - The volume(capacity) of a cuboid is given by:

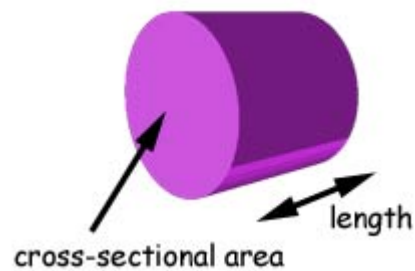
$$\text{volume} = \text{length} \times \text{width} \times \text{height}$$



note: the sides of a cuboid are at right angles to each other

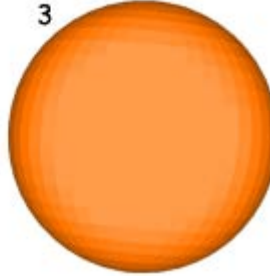
Prism - a shape with variable length and constant cross-sectional area

$$\text{volume} = \text{length} \times \text{cross-sectional area}$$



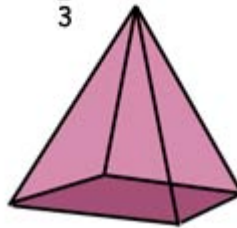
Sphere

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



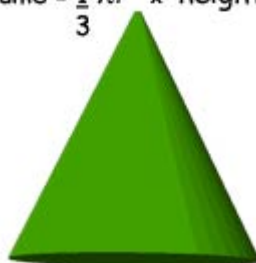
Pyramid - The equation is independent of the number of sides of the pyramid. So the equation works equally for a tetrahedron (with a triangular base) and for other solids with differently shaped base areas.

$$\text{volume} = \frac{1}{3} \text{ base area} \times \text{height}$$



Cone - This is similar to the pyramid, the area of the circle being the base area.

$$\text{volume} = \frac{1}{3} \pi r^2 \times \text{height}$$



Frustrum This is the part of a cone remaining when a top section of the cone, parallel to the base, is removed.

volume of frustrum = [original vol. of cone] - [vol. of removed top section]

$$\text{volume} = \frac{1}{3} \pi r_o^2 h_o - \frac{1}{3} \pi r_r^2 h_r$$

