

AREA, VOLUME, DENSITY , SPEED, ACCELERATION AND VELOCITY



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DEFINITIONS

- ❖ The Area of a shape is the amount of surface enclosed within its boundary lines
- ❖ cm^2/m^2
- ❖ The volume of an object is the amount of space it takes up
- ❖ cm^3/m^3

- ❖ The velocity of an object is its speed in a certain direction
- ❖ m/s, km/h

MEASURING AREA

CM/M2

- ❖ Area of rectangle = length x width
- ❖ Area of a triangle = $\frac{1}{2}$ the base x perpendicular height
- ❖ Area of circle = πr^2

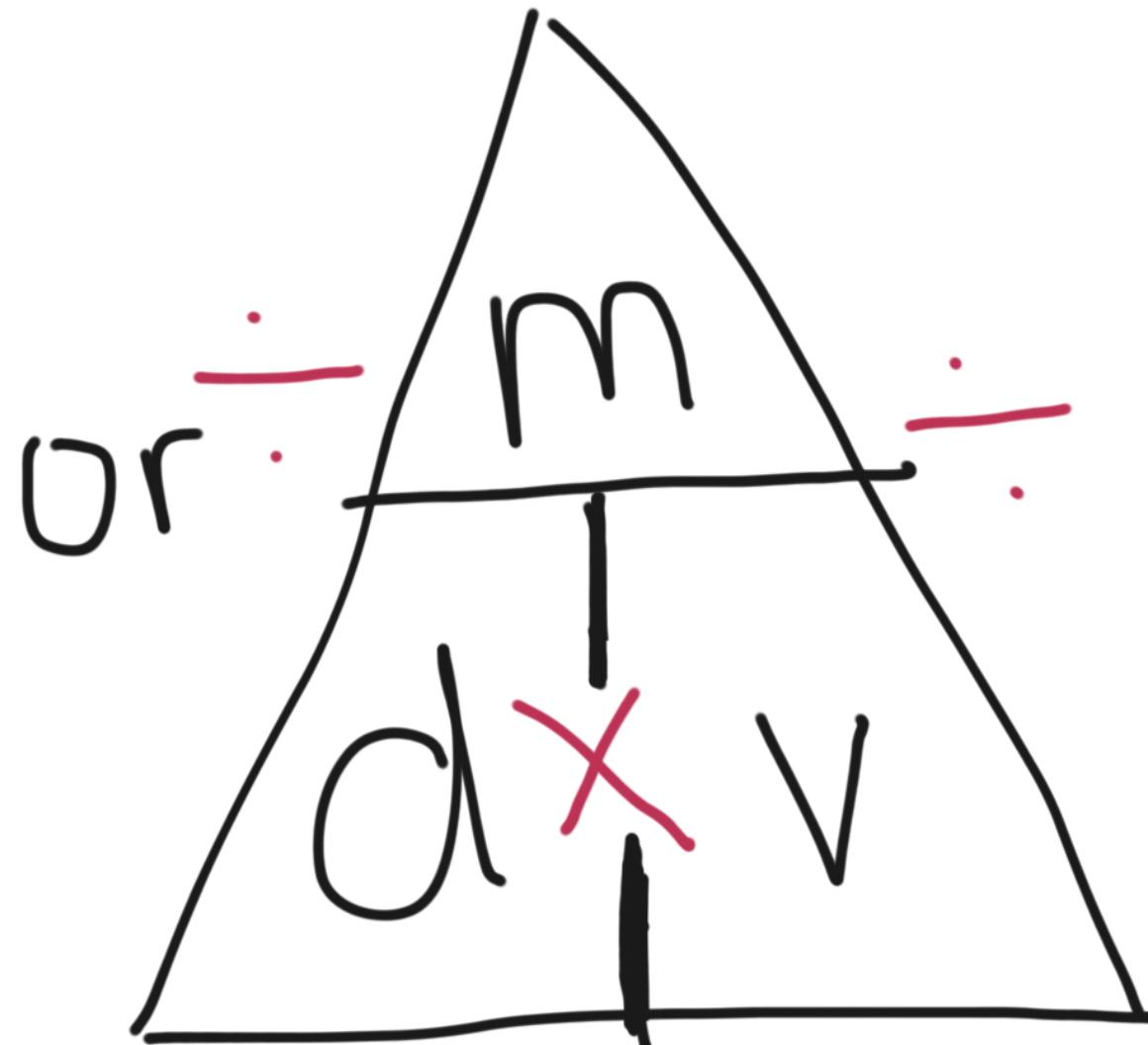
MEASURING VOLUME

❖ cm^3/m^3

- ❖ Volume is how much space an object takes up
- ❖ Volume of rectangular box= length x width x height
- ❖ To measure an irregular object use a graduated cylinder

DENSITY

$$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$$



❖ Unit = g/cm³

FLOATATION

- ❖ A solid will FLOAT in a liquid if it is LESS DENSE
- ❖ A solid will SINK in a liquid if it is MORE DENSE

SPEED

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

OR



❖ Units = m/s

ACCELERATION

$$\text{Acceleration} = \frac{\text{Final speed} - \text{starting speed}}{\text{Time taken for the change in speed.}}$$

$$\text{m/s} = \text{units}$$