

$ABCD \sim HGFE$

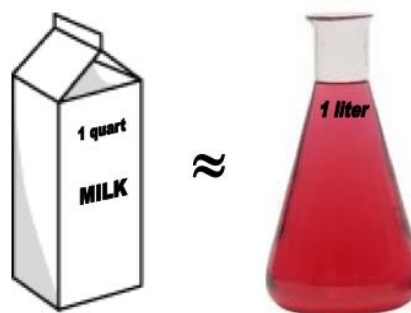
$$\frac{DC}{EF} = \frac{AD}{HE}$$

$$\frac{4}{2} = \frac{12}{x}$$

1 inch or
2.5 centimeter

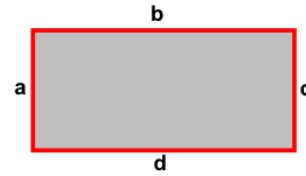


1 yard < 1 meter

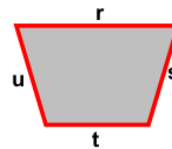


	Fahrenheit	Celsius
Water freezes	32°F	0°C
Water boils	212°F	100°C
Body Temperature	98°F	37°C
Room Temperature	70°F	20°C

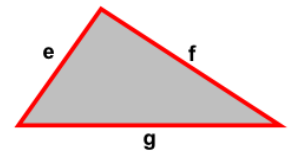
the measure of the distance around a figure



$$P = a + b + c + d$$

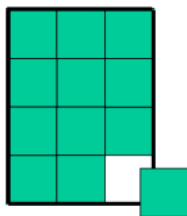


$$P = r + s + t + u$$



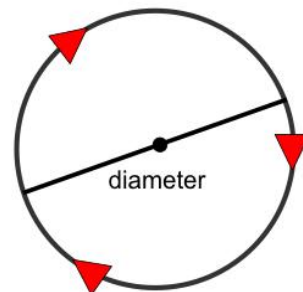
$$P = e + f + g$$

the number of square units needed to cover a surface or figure

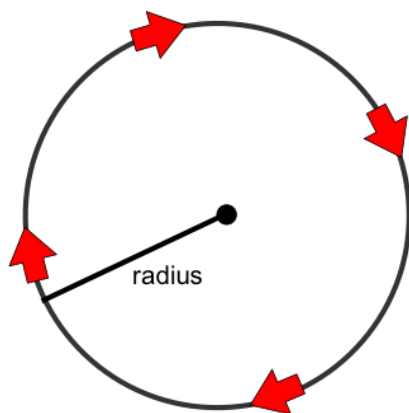


Area = 12 Square Units

$$\pi \approx 3.14159...$$

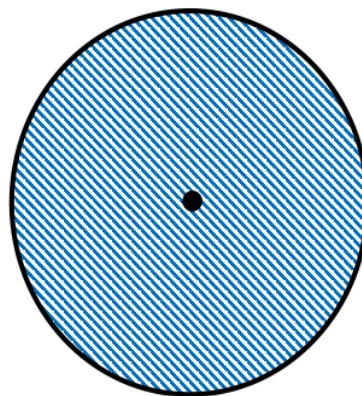


$$\pi = \frac{\text{circumference}}{\text{diameter}}$$

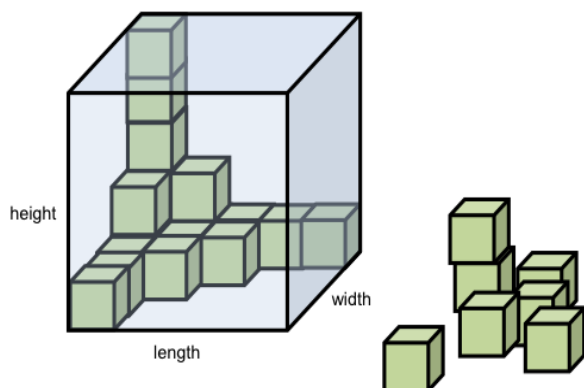


$$C = 2\pi r$$

C = perimeter of a circle



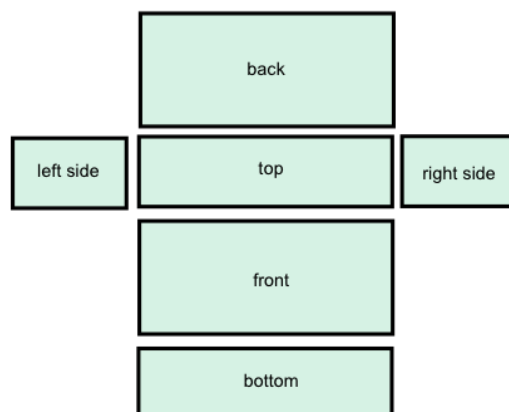
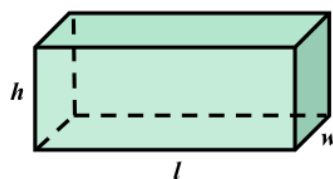
$$A = \pi r^2$$



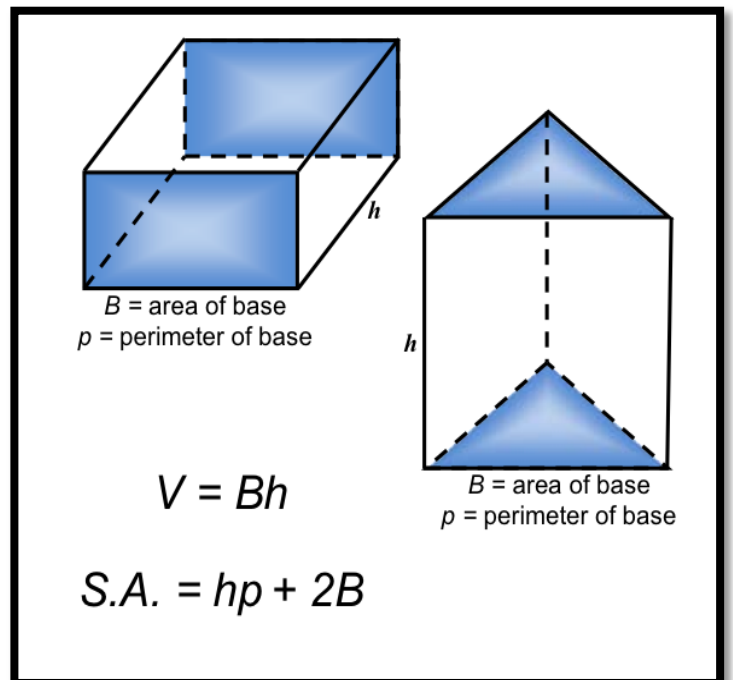
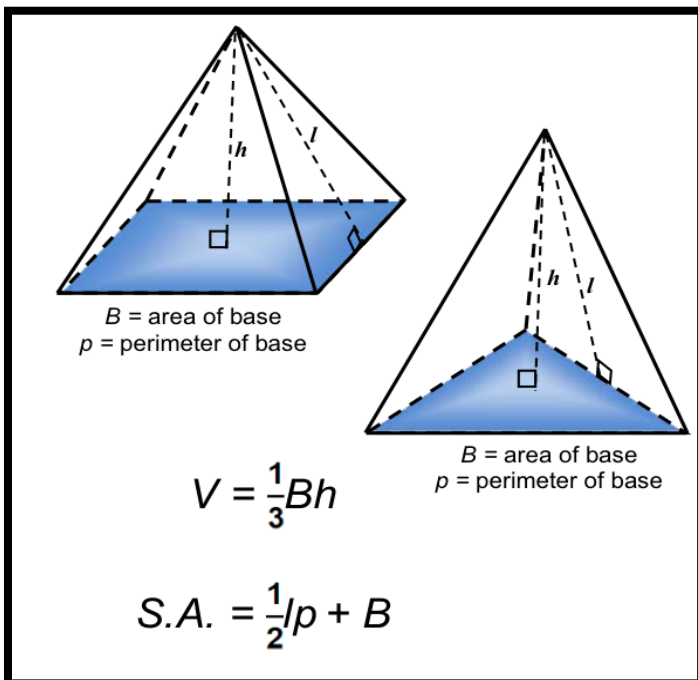
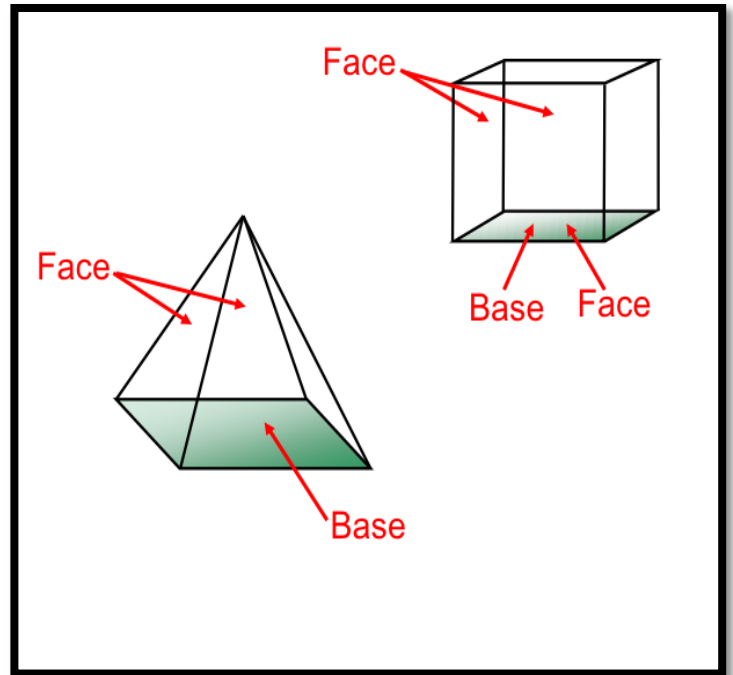
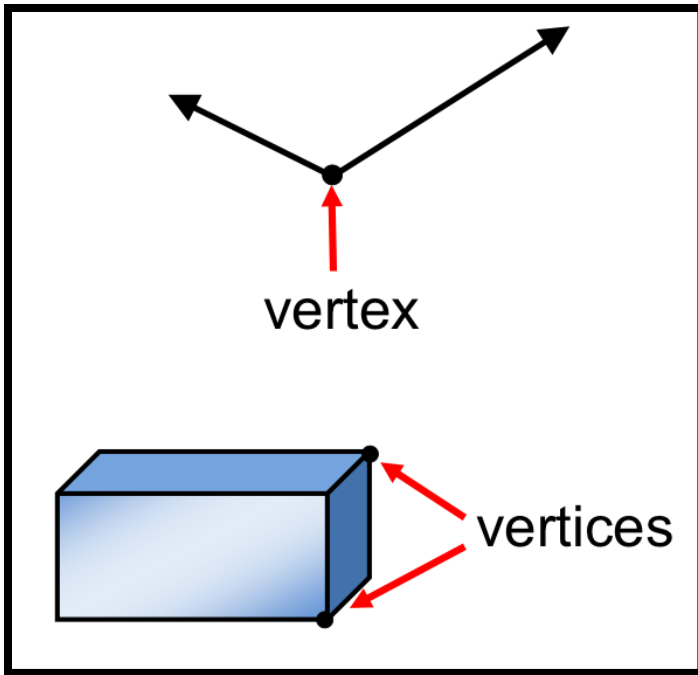
$$\text{Volume} = \text{length} \times \text{width} \times \text{height}$$

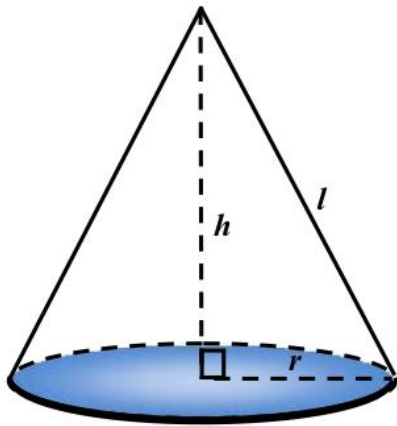
$$V = lwh$$

measured in cubic units



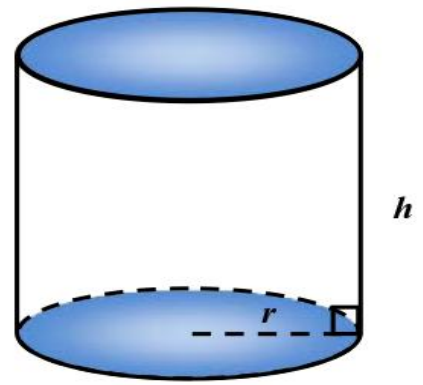
$$\text{Surface Area (S.A.)} = \text{sum of areas of faces}$$





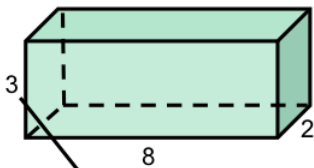
$$V = \frac{1}{3}\pi r^2 h$$

$$S.A. = \pi r^2 + \pi r l$$

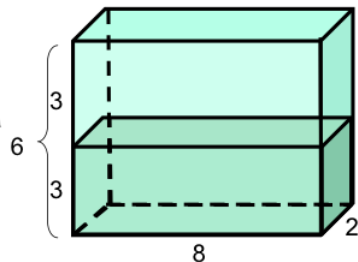


$$V = \pi r^2 h$$

$$S.A. = 2\pi r^2 + 2\pi r h$$



Height increases to 6



What happens to the volume?

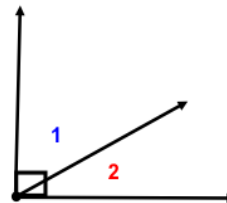


Fig 1

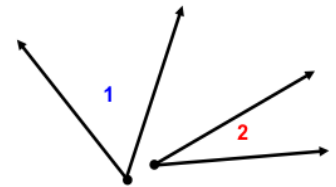


Fig 2

$$m\angle 1 + m\angle 2 = 90^\circ$$

in each figure

Fig 1

Fig 2

$m\angle 1 + m\angle 2 = 180^\circ$
in each figure

$\angle 1$ and $\angle 3$ are vertical angles.
 $\angle 2$ and $\angle 4$ are vertical angles.

$\angle 1 \cong \angle 3$ and $\angle 2 \cong \angle 4$

$\angle 1$ is adjacent to $\angle 2$
in each figure

Fig 1

Fig 2

Fig 3

Share a common side and a
common vertex

ABCD \sim HGFE

Angles	Sides
$\angle A$ corresponds to $\angle H$	\overline{AB} corresponds to \overline{HG}
$\angle B$ corresponds to $\angle G$	\overline{BC} corresponds to \overline{GF}
$\angle C$ corresponds to $\angle F$	\overline{CD} corresponds to \overline{FE}
$\angle D$ corresponds to $\angle E$	\overline{DA} corresponds to \overline{EH}

Corresponding angles are **congruent**.
Corresponding sides are **proportional**.