

$ABCD \sim HGFE$

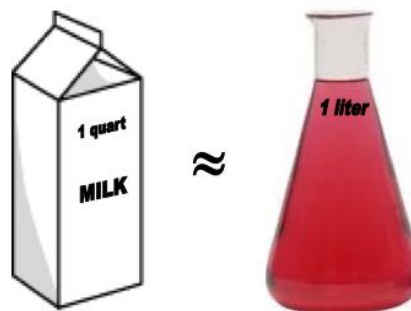
$$\frac{DC}{EF} = \frac{AD}{HE}$$

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

1 inch or
2.5 centimeter



1 yard < 1 meter



**Ballpark
Comparisons
– Length**

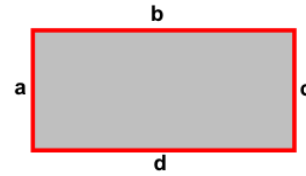
**Similar Figures
and
Proportions**

**Ballpark
Comparisons
– Volume**

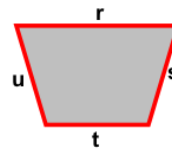
**Ballpark
Comparisons –
Weight/Mass**

	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

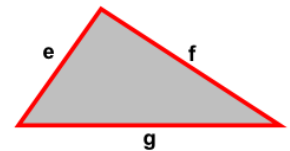
the measure of the distance around a figure



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

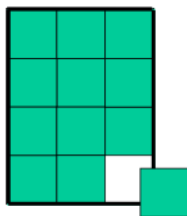


$$P = r + s + t + u$$



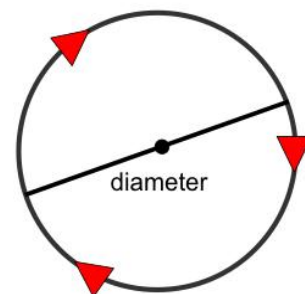
$$P = e + f + g$$

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



Area = 12 Square Units

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



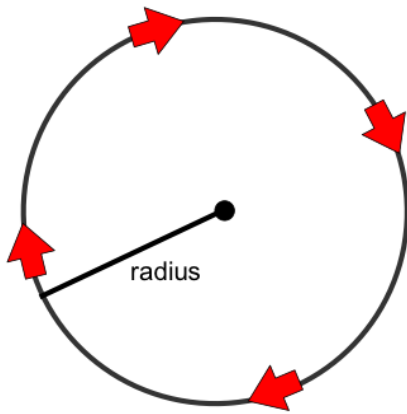
$$\pi = \frac{\text{circumference}}{\text{diameter}}$$

Perimeter

**Ballpark
Comparisons -
Temperature**

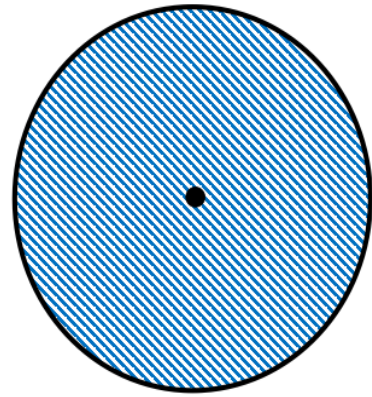
Pi

Area

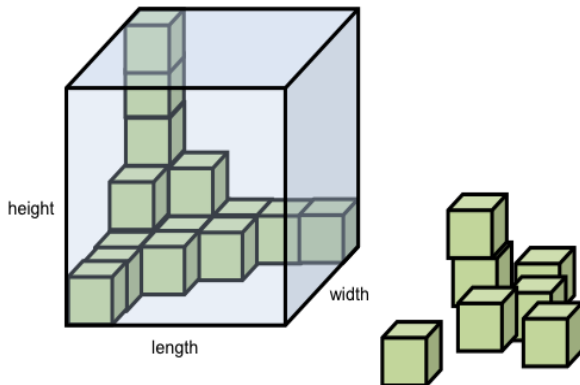


$$C = 2\pi r$$

C = perimeter of a circle



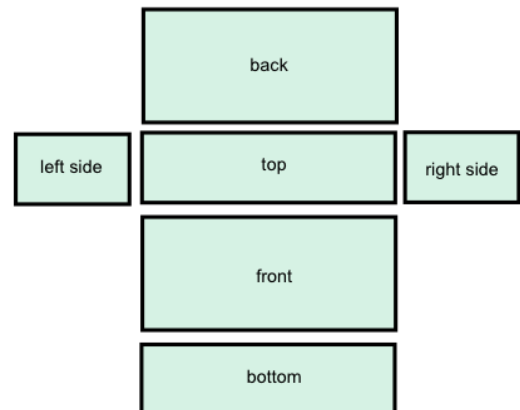
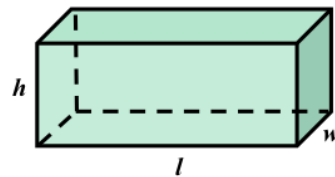
$$A = \pi r^2$$



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

$$V = lwh$$

measured in cubic units



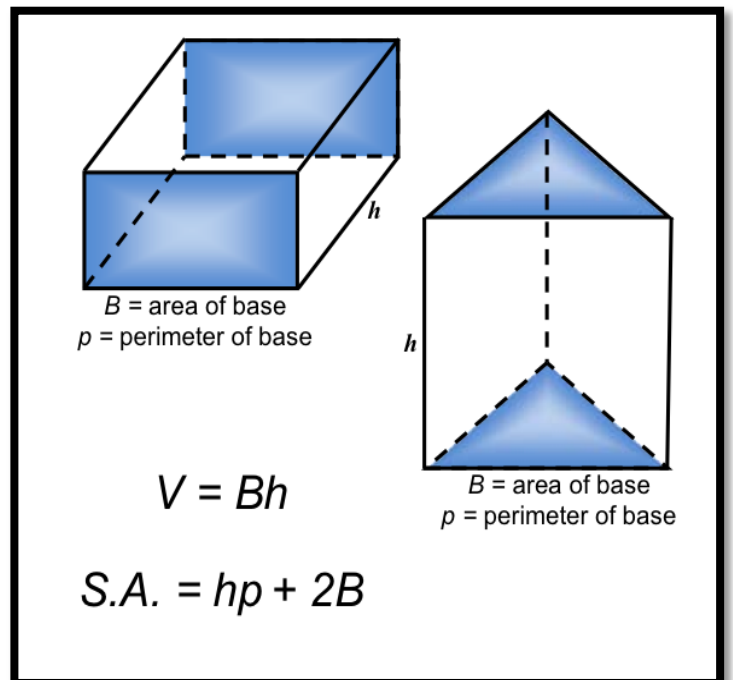
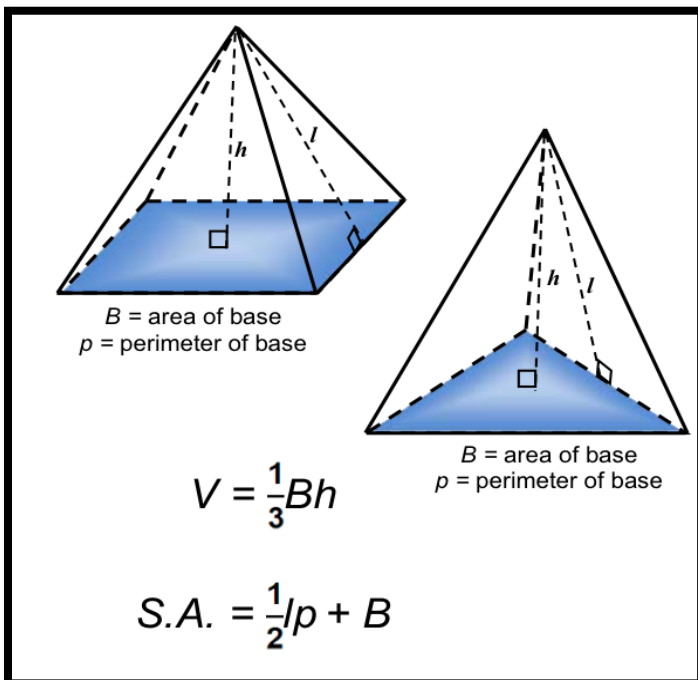
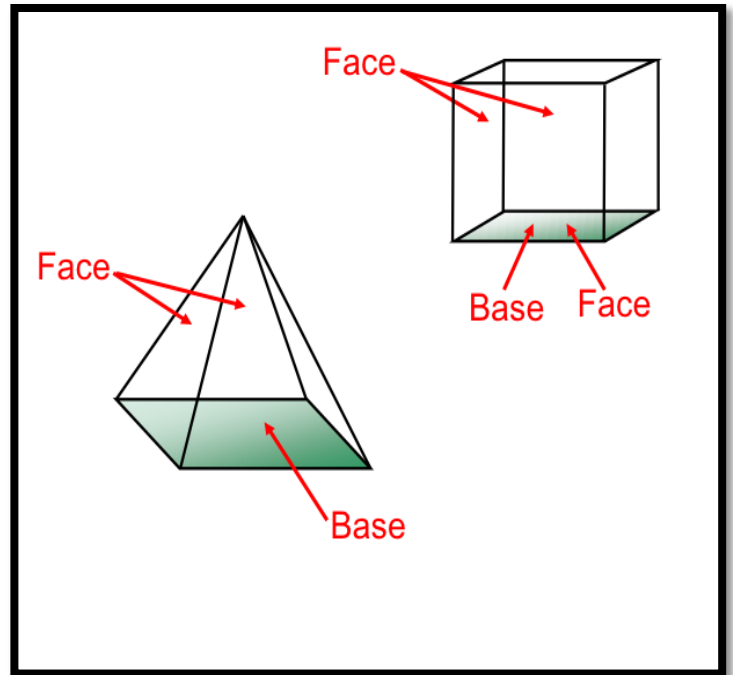
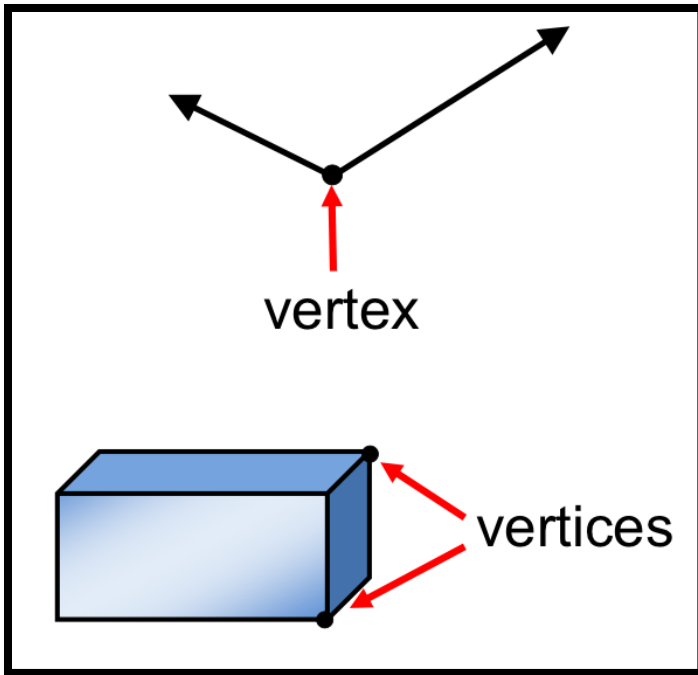
$$\text{Surface Area (S.A.)} = \text{sum of areas of faces}$$

**Area of a
Circle**

Circumference

Surface Area

**Volume of a
Prism**

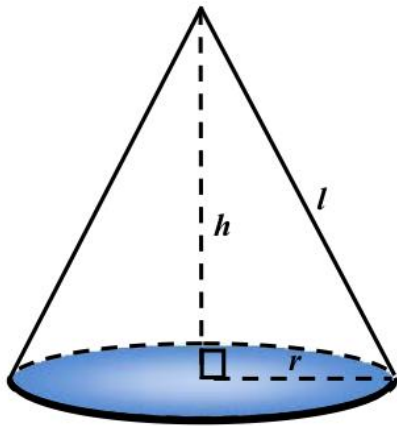


Face and Base

Vertex

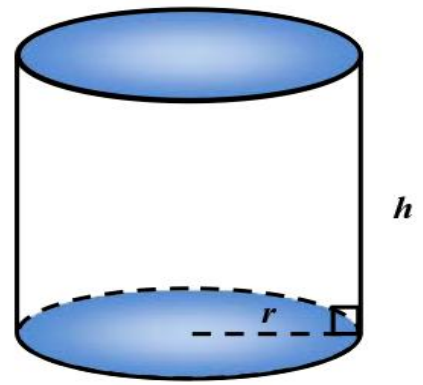
Prism

Pyramid



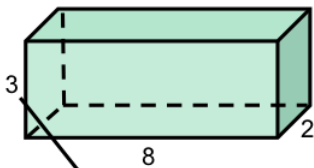
$$V = \frac{1}{3}\pi r^2 h$$

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

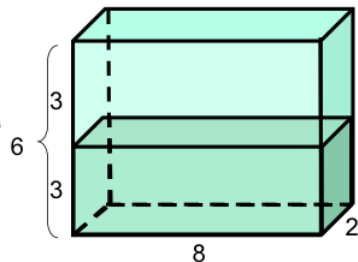


$$V = \pi r^2 h$$

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



Height increases to 6



What happens to the volume?

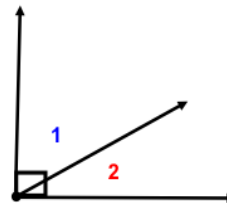


Fig 1

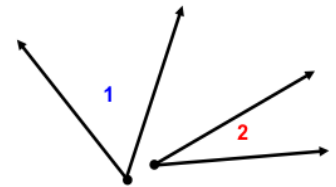


Fig 2

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

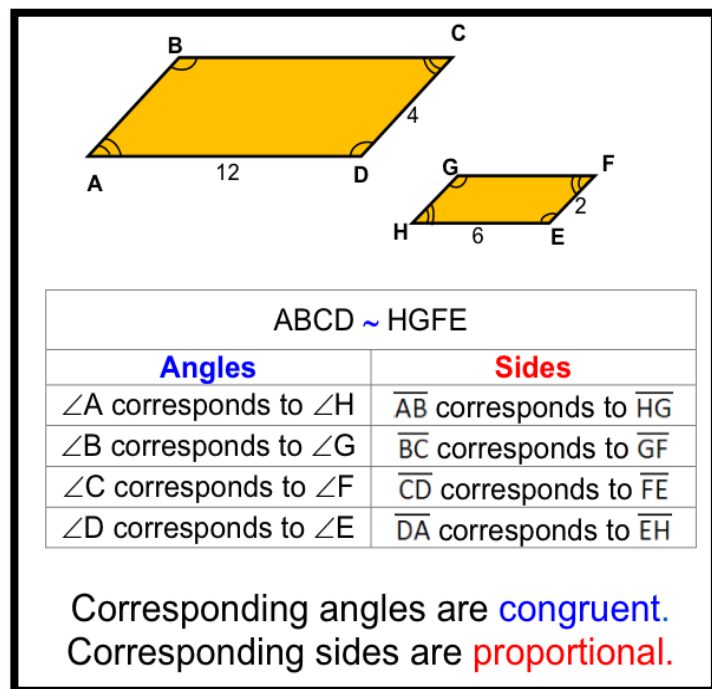
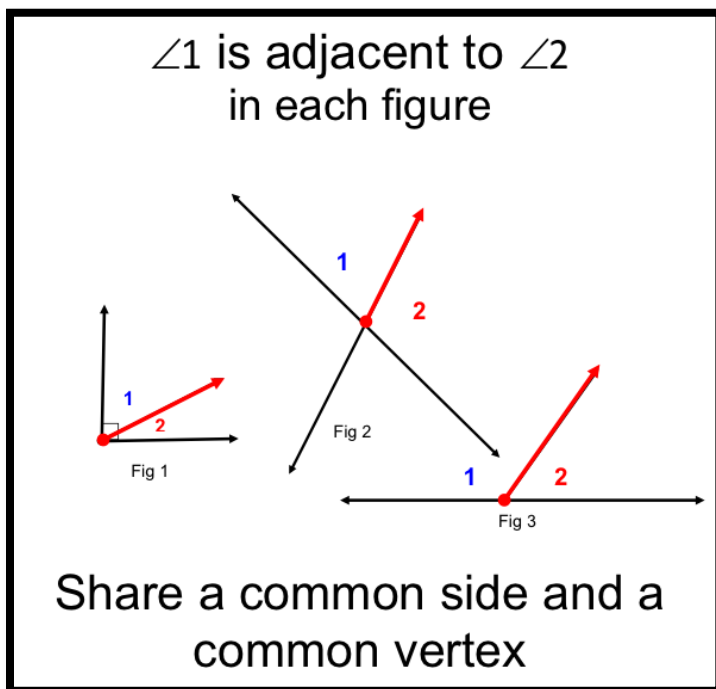
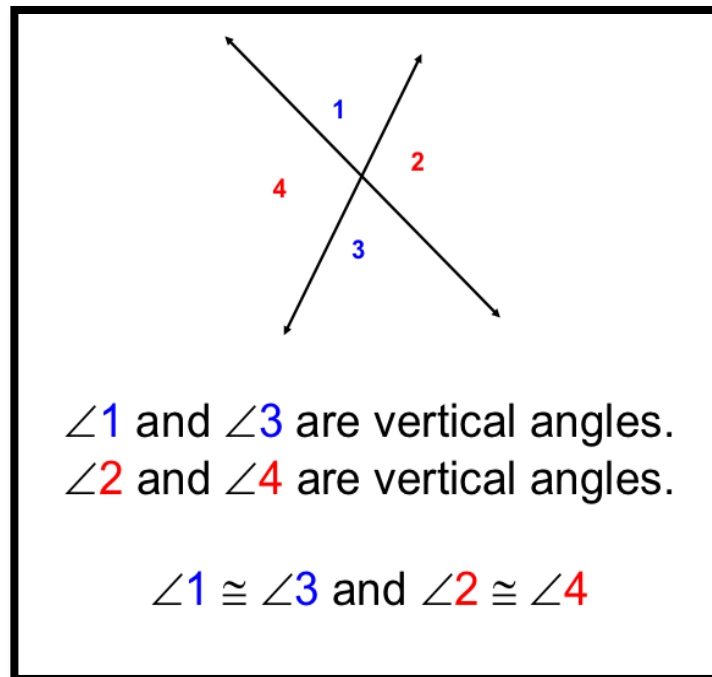
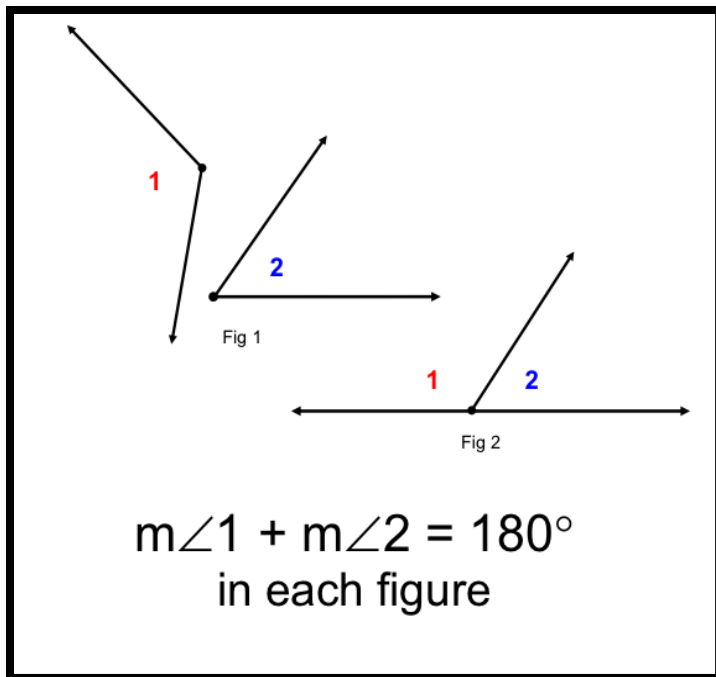
in each figure

Cylinder

Cone

**Complementary
Angles**

Volume



Vertical Angles

**Supplementary
Angles**

Similar Figures

**Adjacent
Angles**