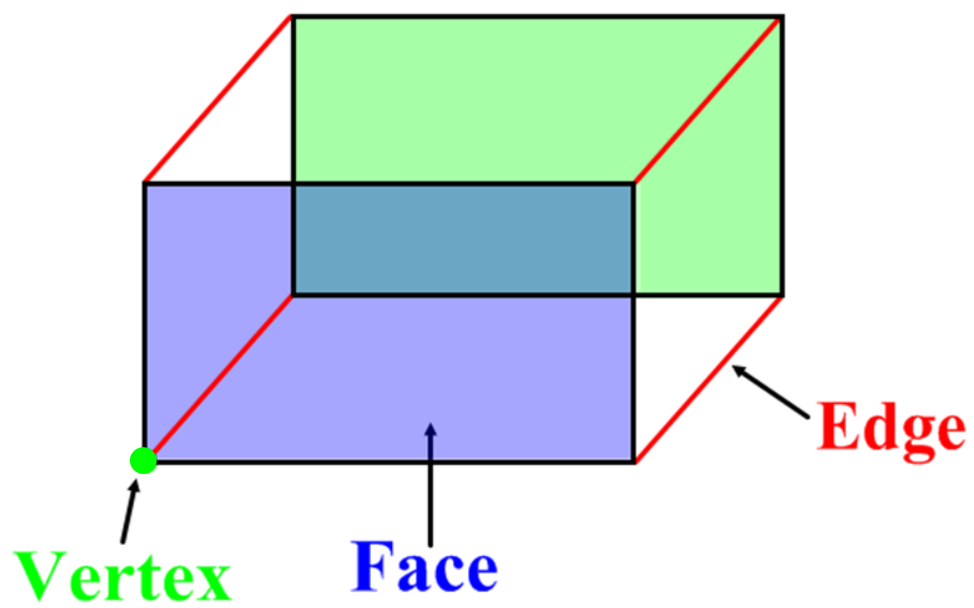


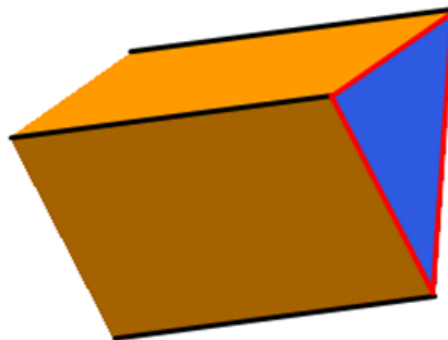
Polyhedra (Solids)

3 dimensional objects



Def. Lateral edges

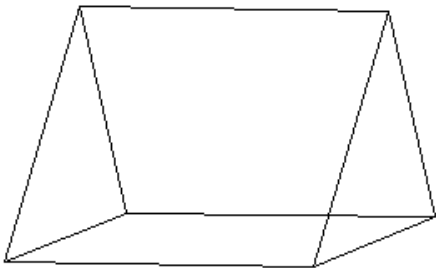
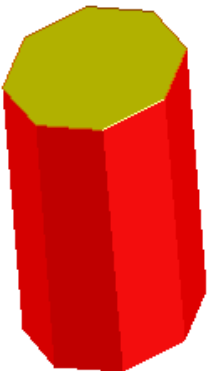
The intersection of 2 adj. lateral faces.



Def. Prism

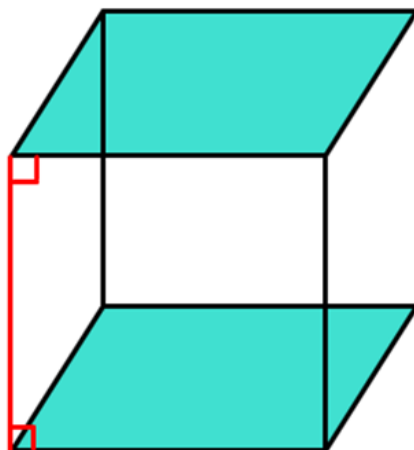
A solid with 2 congruent faces that are polygons contained in parallel planes, called the **bases.**

The other faces are ALWAYS parallelograms, called the **Lateral Faces.**



Def. Altitude (or height) of a prism

A segment that goes from **BASE to BASE** and is **PERPENDICULAR** to both bases.

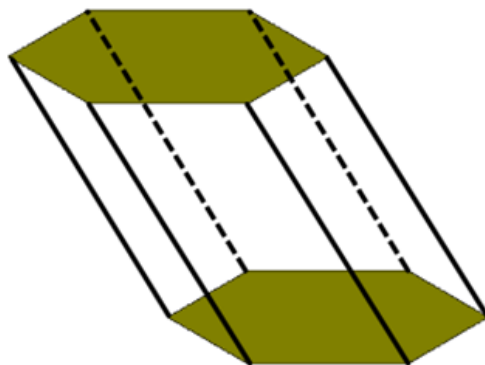


Def. Right Prism

A prism where the lateral edges are also the altitudes.

Def. Oblique Prism

A prism where the lateral edges are **NOT** the altitudes.



Lateral Area of a Right Prism

$$L = Ph$$

Where L is the Lateral area,
 P is the **Perimeter** of **ONE** base,
 h is the **height** of the prism.

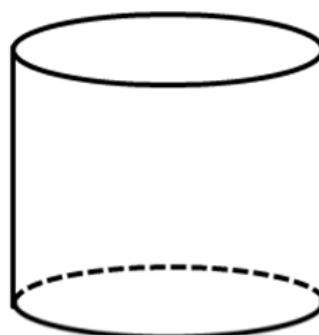
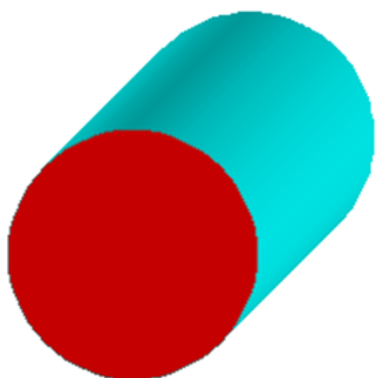
Surface Area of a Right Prism

$$S = Ph + 2B$$

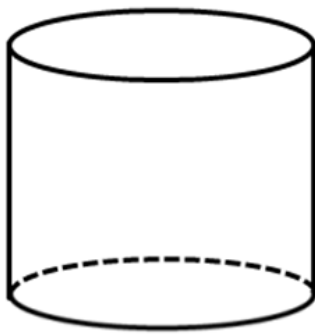
Where S is the Surface area,
 P is the **Perimeter** of **ONE** base,
 h is the **height** of the prism,
 B is the area of 1 **base**.

Def. Cylinder

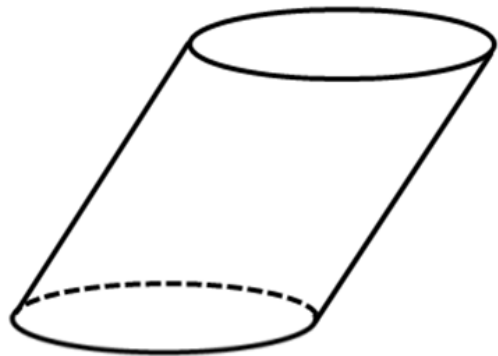
A solid with 2 $\cong$ circular bases.



Right Cylinder

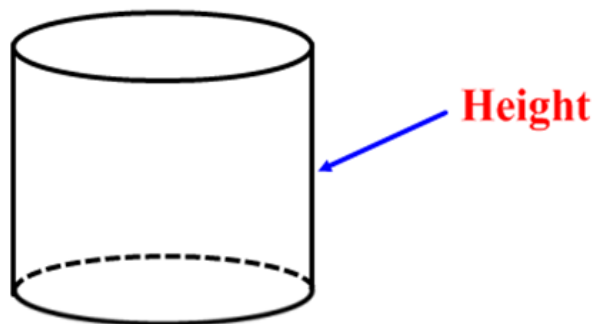


Oblique Cylinder



Def. Height of a Cylinder

The perpendicular distance between the bases



Lateral Area of a Right Cylinder

$$L = 2\pi rh$$

Where L is the Lateral area,
 r is the **radius** of **ONE** base,
 h is the **height** of the cylinder.

Surface Area of a Right Cylinder

$$S = 2\pi rh + 2\pi r^2$$

Where S is the Surface area,
 r is the **radius** of **ONE** base,
 h is the **height** of the cylinder.