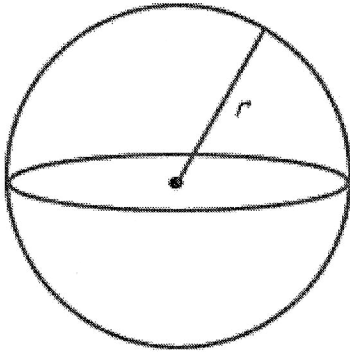


## Useful Equations

### Sphere

Surface Area

$$A = 4\pi r^2$$

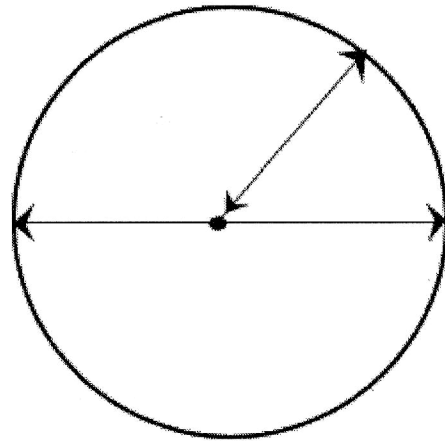


Volume

$$V = \frac{4}{3}\pi r^3$$

### Circle

Perimeter  $C = \pi d$  or  $C = 2\pi r$



Area  $A = \pi r^2$

Note: The value of  $\pi$  is 3.1415926 (to 7 decimal places)

### Cylinder

Surface Area

We will need to calculate the surface area of the top, base and sides.

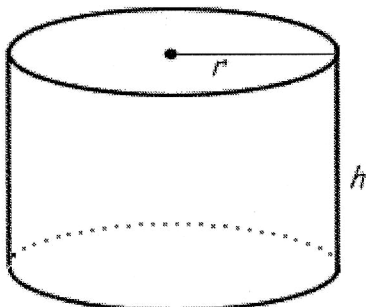
Area of the top is  $\pi r^2$

Area of the bottom is  $\pi r^2$

Area of the side is  $2\pi rh$

Therefore the Formula is:

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

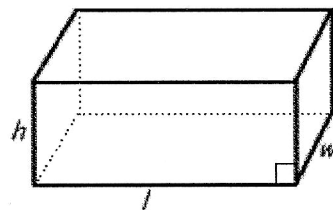


Volume  $V = \pi r^2 h$

### Rectangular Prism

Surface Area

$$A = 2(wh + lw + lh)$$



Volume

$$V = lwh$$