

# Notes on Geometry

## Area

Square =  $s^2$  ..... *side x side*

Rectangle =  $lw$  ..... *length x width*

Triangle =  $bh/2$  ..... *base x height divided by 2*

Circle =  $\pi r^2$  ..... ( $\sim 3.14$ ) *x radius x radius*

Parallelogram =  $bh$  ..... *base x height*

Trapezoid =  $(b_1+b_2)/2 \times h$  ..... *base 1 + base 2 and then divide by 2 to find the average of the two bases. Then multiply by the height.*

## Perimeter

Square =  $4s$  ..... *4 x side*

Rectangle =  $2(l+w)$  ..... *2 x (length + width) Add length and width first then x 2*

Triangle = sum of all three sides

Circle (circumference) =  $d\pi$  ..... *diameter x ( $\sim 3.14$ )  
 $2r\pi$  ..... *2 x radius x (3.14)**

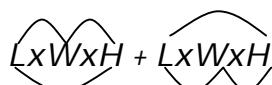
Parallelogram =  $2(l+s)$  ..... *2x(length + side) Add length and side first then x2*

Trapezoid = sum of all four sides

## Surface Area

Cube =  $6s^2$  ..... *6 x side x side*

Rectangular Prism (box) =  $2(lw + wh + lh)$   
..... *2 x (length x width + width x height + length x height)  
kiss-but method*



- o *Multiply pairs*
- o *Add products*
- o *Double sum*

Cylinder =  $2\pi r^2 + 2\pi rh$  ..... *(2 x the area of a circle)+(circumference x height)*

## Volume

Cube =  $s^3$  ..... *side x side x side*

Rectangular Prism (box) =  $lwh$  ..... *length x width x height*

Cylinder =  $\pi r^2 h$  ..... *Area of the circle x the height*

Sphere =  $2/3 \pi r^2 h$  ..... *2/3 x Area of the circle x the height*

Cone =  $1/3 \pi r^2 h$  ..... *1/3 x Area of the circle x the height*