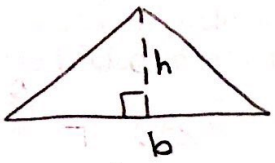
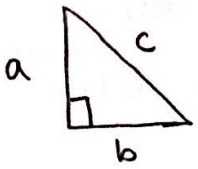
Common Helpful Formulas

Triangles:

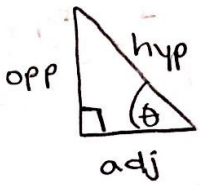


Area: $A = \frac{1}{2}bh$

Right Δs



$a^2 + b^2 = c^2$



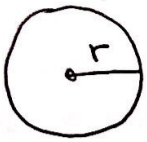
SOH-CAH-TOA

$\sin\theta = \frac{opp}{hyp}$

$\cos\theta = \frac{adj}{hyp}$

$\tan\theta = \frac{opp}{adj}$

Circles:



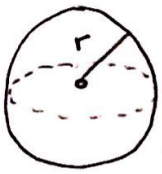
$A = \pi r^2$

circle sector

$A = \frac{1}{2}r^2\theta$ $\quad s = r\theta$

(θ in radians)

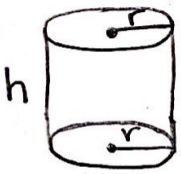
Sphere:



$SA = 4\pi r^2$

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

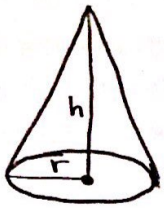
Cylinder



$SA = 2\pi r^2 + 2\pi rh = 2\pi r(r+h)$

$V = \pi r^2 h$

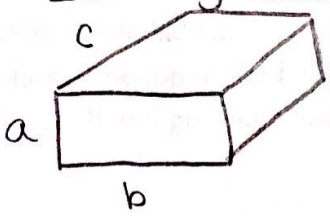
Cone:



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

(conical)

Rectangular Prism: (Box)



$V = abc$

$SA = 2ab + 2bc + 2ac$