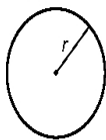


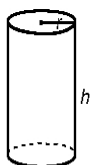
Elementary Algebra Applied Math I Reference Sheet

Circle



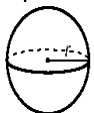
Area = πr^2
Circumference = $2\pi r$
Circumference = πd

Cylinder



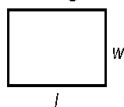
Volume = $\pi r^2 h$
Surface Area = $2\pi r^2 + 2\pi r h$

Sphere



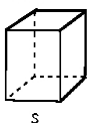
Volume = $\frac{4}{3}\pi r^3$
Surface Area = $4\pi r^2$

Rectangle



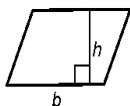
Area = lw
Perimeter = $2l + 2w$

Cube



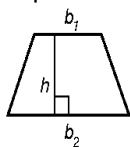
Volume = s^3
Surface Area = $6s^2$

Parallelogram



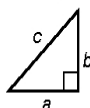
Area = bh

Trapezoid



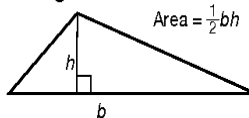
Area = $\frac{1}{2}h(b_1 + b_2)$

Pythagorean Theorem



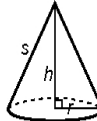
$a^2 + b^2 = c^2$

Triangle



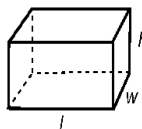
Area = $\frac{1}{2}bh$

Cone



Volume = $\frac{1}{3}\pi r^2 h$
Surface Area = $\pi r^2 + \pi r s$

Rectangular Prism



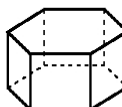
Volume = lwh
Surface Area = $2wl + 2lh + 2wh$

Right Pyramid



Volume = $\frac{1}{3} \times \text{base area} \times h$
Surface Area = $\text{base area} + \text{face areas}$

Right Prism



Volume = $\text{base area} \times h$
Surface Area = $\text{base areas} + \text{face areas}$

Formulas

DISTANCE BETWEEN TWO POINTS: $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

MID-POINT BETWEEN TWO POINTS: $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$

SLOPE: $m = \frac{y_2 - y_1}{x_2 - x_1}$

SLOPE-INTERCEPT FORM: $y = mx + b$

POINT-SLOPE FORM: $y - y_1 = m(x - x_1)$