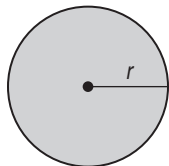


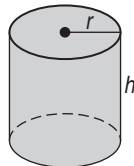
GEE 21 Mathematics Reference Sheet

Circle



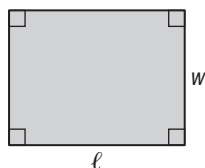
$\pi \approx 3.14$
 Area = πr^2
 Circumference = $2\pi r$

Cylinder



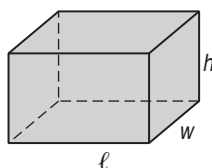
Volume = $\pi r^2 h$
 Surface Area = $2\pi r^2 + 2\pi r h$

Rectangle



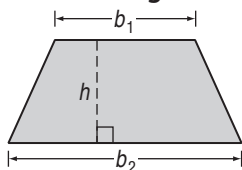
Area = ℓw
 Perimeter = $2w + 2\ell$

Rectangular Solid



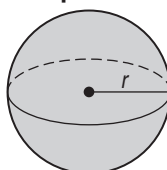
Volume = $\ell w h$
 Surface Area = $2w\ell + 2\ell h + 2wh$

Parallelogram



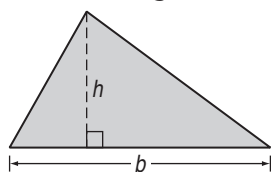
Area = $\frac{1}{2}h(b_1 + b_2)$

Sphere



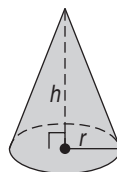
Volume = $\frac{4}{3}\pi r^3$

Triangle



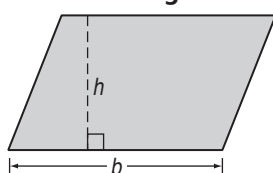
Area = $\frac{1}{2}bh$

Cone



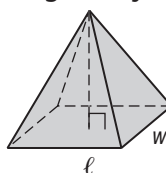
Volume = $\frac{1}{3}\pi r^2 h$

Parallelogram



Area = bh

Rectangular Pyramid



Volume = $\frac{1}{3}\ell w h$

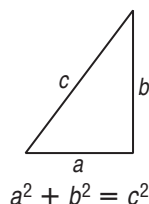
Metric Units of Length

- 1 kilometer = 1,000 meters
- 1 centimeter = 0.01 meter
- 1 millimeter = 0.001 meter
- 1 micrometer = 0.000001 meter

U.S. Units Conversions

- 8 fluid ounces = 1 cup
- 2 cups = 1 pint
- 2 pints = 1 quart
- 4 quarts = 1 gallon
- 16 ounces = 1 pound
- 5,280 feet = 1 mile

Pythagorean Theorem



Cartesian Distance Formula

$AB = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
 (see note below)

Slope Formula

Slope = $\frac{y_2 - y_1}{x_2 - x_1}$
 (see note below)

Note: Point A: (x_1, y_1)
 Point B: (x_2, y_2)