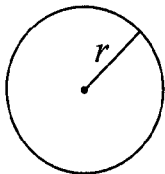


GEE 21 Mathematics Reference Sheet

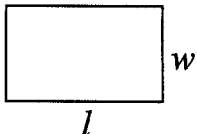
Use the information below to answer questions on the Mathematics test.

Circle



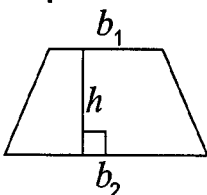
$\pi \approx 3.14$
Area = πr^2
Circumference = $2\pi r$

Rectangle



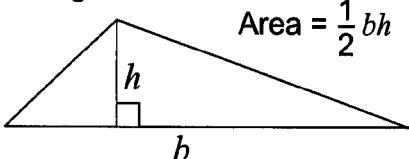
Area = lw
Perimeter = $2l + 2w$

Trapezoid



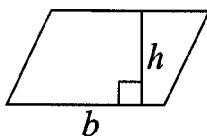
Area = $\frac{1}{2}h(b_1 + b_2)$

Triangle



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

Parallelogram



Area = bh

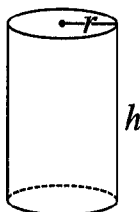
Metric Units of Length

- 1 kilometer = 1000 meters
- 1 centimeter = 0.01 meter
- 1 millimeter = 0.001 meter
- 1 micrometer = 0.000001 meter

U.S. Unit Conversions

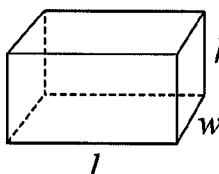
- 8 fluid ounces = 1 cup
- 2 cups = 1 pint
- 2 pints = 1 quart
- 4 quarts = 1 gallon
- 16 ounces = 1 pound
- 5,280 feet = 1 mile

Cylinder



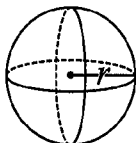
Volume = $\pi r^2 h$
Surface Area = $2\pi r^2 + 2\pi r h$

Rectangular Solid



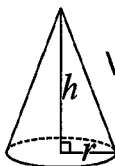
Volume = lwh
Surface Area = $2wl + 2lh + 2wh$

Sphere



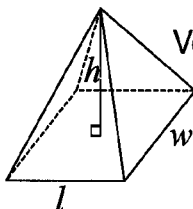
Volume = $\frac{4}{3}\pi r^3$

Cone



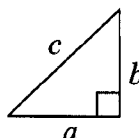
Volume = $\frac{1}{3}\pi r^2 h$

Rectangular Pyramid



Volume = $\frac{1}{3}lwh$

Pythagorean Theorem



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

Cartesian Distance Formula

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

(see note below)

Slope Formula

$$\text{slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

(see note below)

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