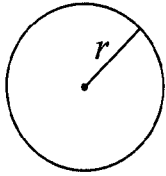


Use the information below to answer questions on the Mathematics test.

## Circle

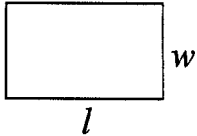


$$\pi \approx 3.14$$

$$\text{Area} = \pi r^2$$

$$\text{Circumference} = 2\pi r$$

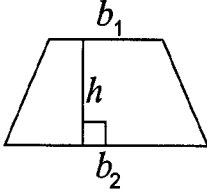
## Rectangle



$$\text{Area} = lw$$

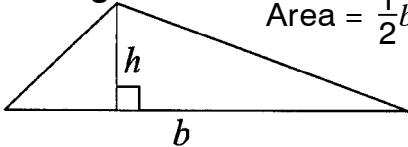
$$\text{Perimeter} = 2l + 2w$$

## Trapezoid



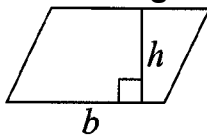
$$\text{Area} = \frac{1}{2}h(b_1 + b_2)$$

## Triangle



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

## Parallelogram



$$\text{Area} = bh$$

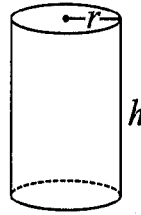
## Metric Units of Length

- 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

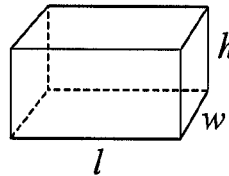
## Cylinder



$$\text{Volume} = \pi r^2 h$$

$$\text{Surface Area} = 2\pi r^2 + 2\pi rh$$

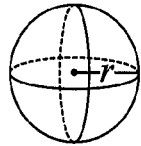
## Rectangular Solid



$$\text{Volume} = lwh$$

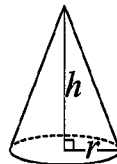
$$\text{Surface Area} = 2wl + 2lh + 2wh$$

## Sphere



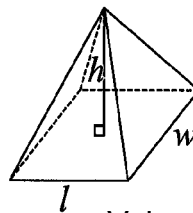
$$\text{Volume} = \frac{4}{3}\pi r^3$$

## Cone



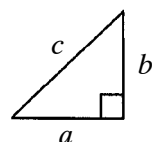
$$\text{Volume} = \frac{1}{3}\pi r^2 h$$

## Rectangular Pyramid



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

## 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:  $(x_2, y_2)$