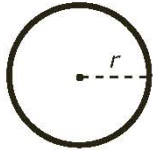
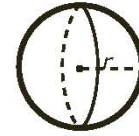


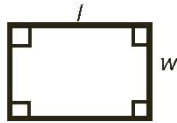
Use the information below as needed to answer questions on the mathematics test.

**Circle**

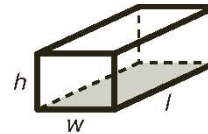
$$\begin{aligned}\text{Area} &= \pi r^2 \\ \text{Circumference} &= \pi d \\ &= 2\pi r\end{aligned}$$

**Sphere**

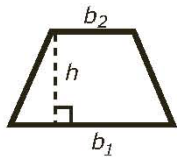
$$\begin{aligned}\text{Volume} &= \frac{4}{3}\pi r^3 \\ \text{Surface Area} &= 4\pi r^2\end{aligned}$$

**Rectangle**

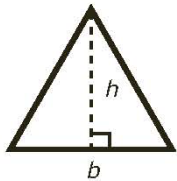
$$\begin{aligned}\text{Area} &= lw \\ \text{Perimeter} &= 2l + 2w \\ &= 2(l + w)\end{aligned}$$

**Rectangular Prism**

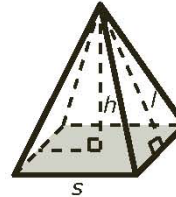
$$\begin{aligned}\text{Volume} &= lwh \\ \text{Surface Area} &= 2(lw) + 2(hw) + 2(lh)\end{aligned}$$

**Trapezoid**

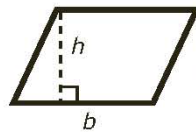
$$\text{Area} = \frac{1}{2}(b_1 + b_2)h$$

**Triangle**

$$\begin{aligned}\text{Area} &= \frac{1}{2}bh \\ &= \frac{bh}{2}\end{aligned}$$

**Right Square Pyramid**

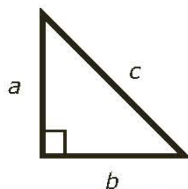
$$\begin{aligned}\text{Volume} &= \frac{1}{3}s^2h \\ \text{Surface Area} &= s^2 + 2sl\end{aligned}$$

**Parallelogram**

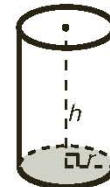
$$\text{Area} = bh$$

**Right Circular Cone**

$$\begin{aligned}\text{Volume} &= \frac{1}{3}\pi r^2h \\ \text{Surface Area} &= \pi r^2 + \pi rl\end{aligned}$$

**Pythagorean Theorem**

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

**Right Circular Cylinder**

$$\begin{aligned}\text{Volume} &= \pi r^2h \\ \text{Surface Area} &= 2\pi r^2 + 2\pi rh\end{aligned}$$

**Metric Units of Length**

1 kilometer	=	1,000	meters
1 hectometer	=	100	meters
1 dekameter	=	10	meters
1 meter	=	1	meter
1 decimeter	=	0.1	meter
1 centimeter	=	0.01	meter
1 millimeter	=	0.001	meter

$$\text{Distance: } d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$\text{Midpoint: } \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$