MATHEMATICS

Formulas

Below are formulas you may find useful as you work the problems. However, some of the formulas may not be used. You may refer to this page as you take the test.

Circumference

$C = \pi d$ or $C = 2\pi r$ $\pi = 3.14$

Area

Rectangle $A = bh$ or $A = lw$

Triangle $A = \frac{1}{2} bh$

Circle $A = \pi r^2$

Pythagorean Theorem

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

Mean

$$\bar{x} = \frac{x_1 + x_2 + x_3 + \ldots + x_n}{n}$$

Mean Absolute Deviation

$$\frac{\text{Total Distance (of all values from the mean value)}}{\text{Number of values}}$$

Interquartile Range: the difference between the first quartile and third quartile of a set of data

Volume

Rectangular Prism Volume = (area of base) × (height) or $V = lwh$

Cylinder Volume = (area of base) × (height)

Sphere $V = \frac{4}{3} \pi r^3$

Cone $V = \frac{1}{3} Bh$