

## FORMULAS

<b>AREA of a:</b>	<p>square                      rectangle                      parallelogram                      triangle                      trapezoid                      circle</p>	<p>Area = side<sup>2</sup>                      Area = length × width                      Area = base × height                      Area = <math>\frac{1}{2}</math> × base × height                      Area = <math>\frac{1}{2}</math> × (base<sub>1</sub> + base<sub>2</sub>) × height                      Area = <math>\pi</math> × radius<sup>2</sup>; <math>\pi</math> is approximately equal to 3.14.</p>
<b>PERIMETER of a:</b>	<p>square                      rectangle                      triangle</p>	<p>Perimeter = 4 × side                      Perimeter = 2 × length + 2 × width                      Perimeter = side<sub>1</sub> + side<sub>2</sub> + side<sub>3</sub></p>
<b>CIRCUMFERENCE of a circle</b>		<p>Circumference = <math>\pi</math> × diameter; <math>\pi</math> is approximately equal to 3.14.</p>
<b>VOLUME of a:</b>	<p>cube                      rectangular solid                      square pyramid                      cylinder                        cone</p>	<p>Volume = edge<sup>3</sup>                      Volume = length × width × height                      Volume = <math>\frac{1}{3}</math> × (base edge)<sup>2</sup> × height                      Volume = <math>\pi</math> × radius<sup>2</sup> × height; <math>\pi</math> is approximately equal to 3.14.                        Volume = <math>\frac{1}{3}</math> × <math>\pi</math> × radius<sup>2</sup> × height; <math>\pi</math> is approximately equal to 3.14.</p>
<b>COORDINATE GEOMETRY</b>		<p>distance between points = <math>\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}</math>;                      (x<sub>1</sub>, y<sub>1</sub>) and (x<sub>2</sub>, y<sub>2</sub>) are two points in a plane.                      slope of a line = <math>\frac{y_2 - y_1}{x_2 - x_1}</math>; (x<sub>1</sub>, y<sub>1</sub>) and (x<sub>2</sub>, y<sub>2</sub>) are two points on the line.</p>
<b>PYTHAGOREAN RELATIONSHIP</b>		<p><math>a^2 + b^2 = c^2</math>; <math>a</math> and <math>b</math> are legs and <math>c</math> the hypotenuse of a right triangle.</p>
<b>MEASURES OF CENTRAL TENDENCY</b>		<p><b>mean</b> = <math>\frac{x_1 + x_2 + \dots + x_n}{n}</math>, where the <math>x</math>'s are the values for which a mean is desired, and <math>n</math> is the total number of values for <math>x</math>.    <b>median</b> = the middle value of an odd number of <u>ordered</u> scores, and halfway between the two middle values of an even number of <u>ordered</u> scores.</p>
<b>SIMPLE INTEREST</b>		<p>interest = principal × rate × time</p>
<b>DISTANCE</b>		<p>distance = rate × time</p>
<b>TOTAL COST</b>		<p>total cost = (number of units) × (price per unit)</p>