GEOMETRIC FORMULAS

Shape	Formula
Circle	Area = Square of Diameter x .7854 or Square of Radius x 3.1416
	Circumference = Diameter X 3.1416
	Diameter = Circumference X .3183
	Doubling diameter increases area four times, tripling diameter increases area nine times, etc.
Square	Area = Square of Side
	Diagonal = Side x 1.4142
	Side = Diagonal x .7071
Square inscribed in Circle	Side of Square = Diameter of Circle x .7071 or Circumference of Circle x .2251
	Diameter of Circle = Side of Square x 1.4142
	Circumference of Circle = Side of Square x 4.4429
Square and Circle with Equal Area	Side of Square = Diameter of Circle x .8862
	Diameter of Circle = Side of Square x 1.128
	Circumference of Circle = Side of Square x 3.545
Rectangle	Area = Length x Width
	Diagonal = Square root of sum of squares of Width and Length
Triangle	Area = Base x 1/2 of Perpendicular Height
Hexagon (equal sides and angles)	Area = Square of Distance across Flats x .866 or Square of Side x 2.598
	Side = 1/2 of Diagonal or Distance across Flats x .577
	Diagonal = Distance across Flats x 1.155 or Side x 2
Octagon (equal sides and angles)	Area = Square of Distance across Flats x .828 or Square of Side x 4.828
	Side = Diagonal x .383 or Distance across Flats x .414
	Diagonal = Distance across Flats x 1.082 or Side x 2.613
Sphere	Area of Surface = Square of Diameter x 3.1416
	Volume = Cube of Diameter x .5236
Cube	Area of Surface = Square of Side x 6
	Volume = Cube of Side
	Diagonal = Side x 1.732
Cylinder	Area of Curved Surface = Diameter x Length x 3.1416
	Volume = Square of Diameter x Length x .7854
Cone	Area od Curved Surface = Diameter of Base X Slant Height x 1.5708
	Volume = Diameter of Base Squared x Perpendicular Height x .2618 or Area of Base x 1/3 Perpendicular Height
Pyramid	Lateral Surface Area (not incl. base) = Perimeter of Base x 1/2 of Slant Height
	Volume = Area of Base x 1/3 Perpendicular Height