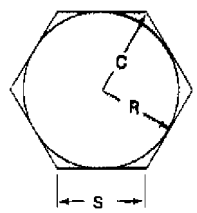
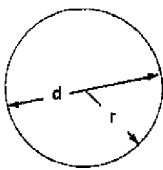
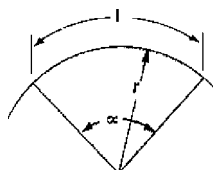
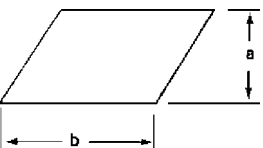
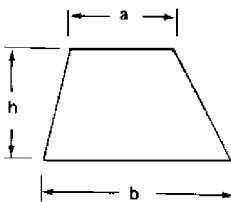
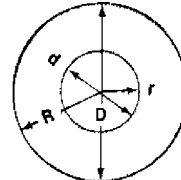
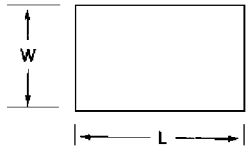
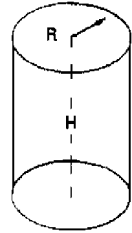
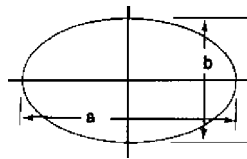
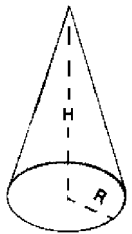
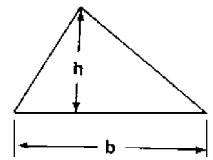
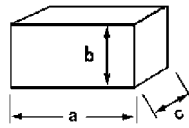
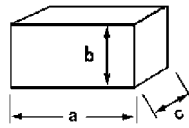


FORMULAS FOR DETERMINING GEOMETRIC AREAS AND VOLUMES

	<p>Hexagon</p> <p>$C = S = 1.155R$ $\text{Area} = 2.598S^2$ $= 3.464R^2$</p>
	<p>Circle</p> <p>$A = \text{area}$ $C = \text{circumference.}$ $A = \pi r^2 = \frac{\pi d^2}{4}$ $C = 2\pi r = \pi D$</p>
	<p>Circular Sector</p> <p>$A = \text{area}$; $l = \text{length of arc}$; $\alpha = \text{angle, in degrees.}$ $l = \frac{r \times \alpha \times 3.1416}{180}$ $A = \frac{1}{2} rl$ $\alpha = \frac{57.296 l}{r}$</p>
	<p>Parallelogram</p> <p>$A = \text{area.}$ $A = ab$</p> <p>Note that dimension a is measured at right angles to line b.</p>
	<p>Regular Polygon</p> <p>$A = \text{area}$ $n = \text{number of sides.}$ $\alpha = 360^\circ \div n$ $\beta = 180^\circ - \alpha$ $A = \frac{nsr}{2} = \frac{ns}{2} \sqrt{\frac{R^2 - s^2}{4}}$ $R = \sqrt{r^2 + \frac{s^2}{4}}$; $r = \sqrt{R^2 - \frac{s^2}{4}}$; $s = 2\sqrt{R^2 - r^2}$</p>
	<p>Trapezoid</p> <p>$A = \text{area.}$ $A = \frac{(a + b)h}{2}$</p>
	<p>Circular Ring</p> <p>$A = \text{area}$ $A = \pi (R^2 - r^2)$ $= 0.7854 (D^2 - d^2)$</p>
	<p>Rectangle or Square</p> <p>$\text{Area} = L \times W$</p>
	<p>Cylinder</p> <p>$\text{Area} = 2\pi R (R + H)$ $\text{Volume} = \pi R^2 H$</p>
	<p>Ellipse</p> <p>$a = \text{major axis}$; $b = \text{minor axis.}$ $A = \frac{\pi ab}{4}$</p>
	<p>Cone</p> <p>$\text{Area} = \pi R \sqrt{(R^2 + H^2)}$ $\text{Volume} = \frac{\pi R^2 H}{3}$</p>
	<p>Triangle</p> <p>$A = \text{area.}$ $A = \frac{bh}{2}$</p>
	<p>Square Prism</p> <p>$V = \text{volume.}$ $A = \text{area of surface.}$ $V = abc$ $A = 2ab + 2ac + 2bc$</p>