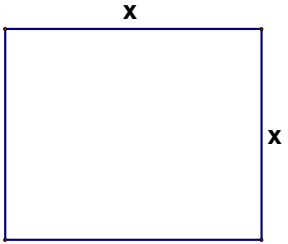
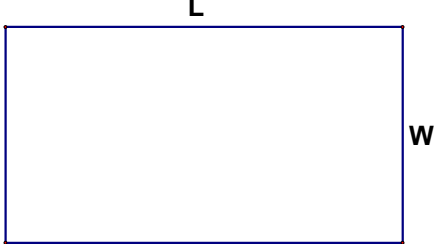
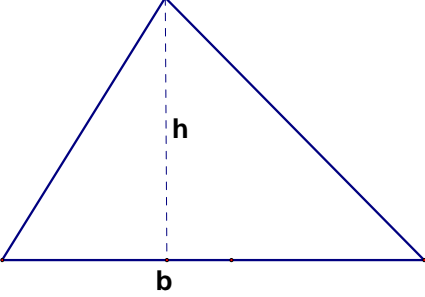
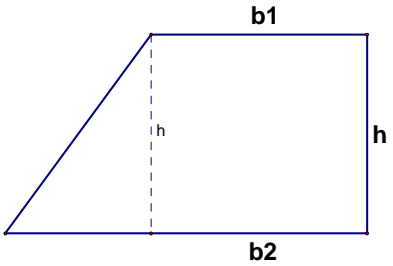
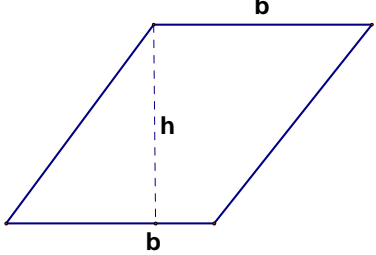
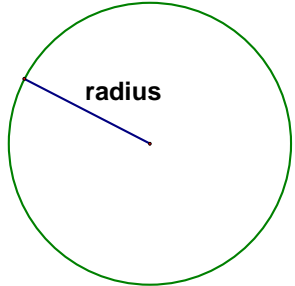
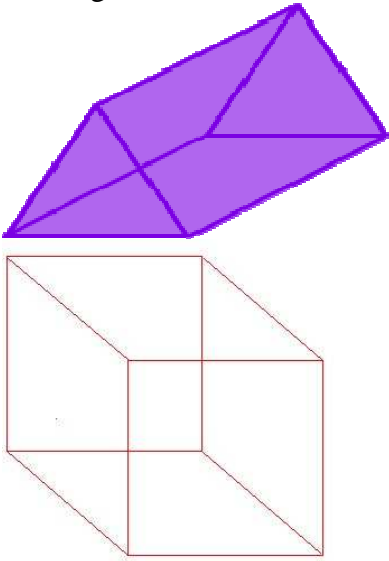
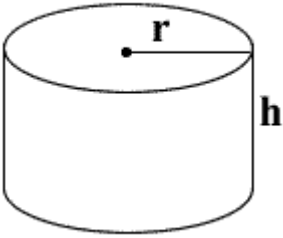
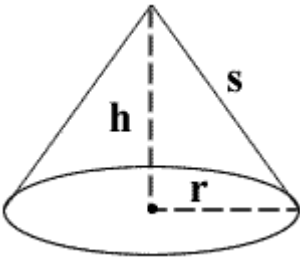
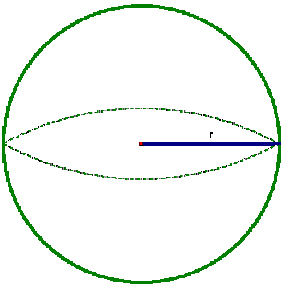
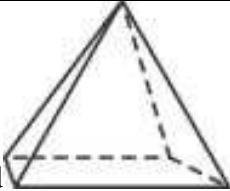


## Formulas for Area & Perimeter of 2D Shapes

Shape	Perimeter	Area
Square 	$P = 4x$	$A = x^2$
Rectangle 	$P = 2L + 2W$	$A = L \times W$
Triangle 	$P = \text{sum of the 2 sides}$	$A = \frac{1}{2} b \times h$
Trapezoid 	$P = \text{sum of the 4 sides}$	$A = \frac{1}{2} (b_1 + b_2) \times h$
Parallelogram 	$P = \text{sum of the 4 sides}$ $P = \text{double the sum of the 2 sides}$	$A = b \times h$
Circle 	$P = \text{circumference}$ $P = 2\pi r$ $P = \pi d$	$A = \pi r^2$

# Formulas for Surface Area and Volume of 3D Shapes

Shape	Volume	Surface Area
<p data-bbox="94 212 332 243">Rectangular Prism</p> 	<p data-bbox="613 443 997 512"><math>V_T = \text{area of triangular base} \times \text{length of prism}</math></p> <p data-bbox="634 548 976 579"><math>V_R = \text{area of base} \times \text{height}</math></p>	<p data-bbox="1068 422 1511 491">SA = area of 2 triangles + the sum of 3 rectangles</p> <p data-bbox="1068 527 1511 596">SA = twice the area of each of the opposite faces</p>
<p data-bbox="94 1087 220 1119">Cylinders</p> 	<p data-bbox="748 947 862 978"><math>V = \pi r^2 h</math></p>	<p data-bbox="1060 915 1520 984">SA = area of 2 circles + area of one rectangle</p> <p data-bbox="1175 984 1403 1016"><math>SA = 2\pi r^2 + 2\pi r h</math></p>
<p data-bbox="94 1392 175 1423">Cones</p> 	<p data-bbox="724 1251 886 1283"><math>V = \frac{1}{3} \pi r^2 h</math></p>	<p data-bbox="1084 1230 1495 1299">SA = <math>\pi r^2 + \pi r s</math> (where s = slant height)</p>
<p data-bbox="94 1696 185 1728">Sphere</p> 	<p data-bbox="732 1556 878 1587"><math>V = \frac{4}{3} \pi r^3</math></p>	<p data-bbox="1224 1556 1354 1587">SA = <math>4\pi r^2</math></p>
<p data-bbox="94 1885 201 1917">Pyramid</p> 	<p data-bbox="634 1801 976 1833"><math>V = \frac{1}{3}(\text{Area of Base}) \times h</math></p>	<p data-bbox="1110 1791 1471 1860">V = area of base + area of 4 triangles</p>