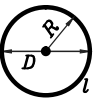
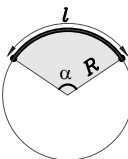
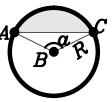
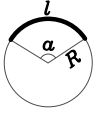


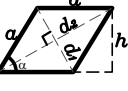
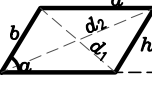
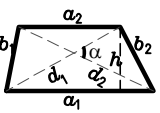
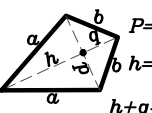
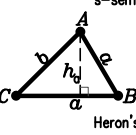
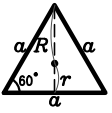
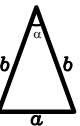
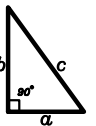
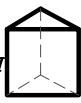
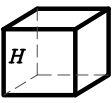

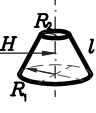

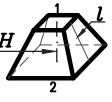
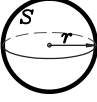
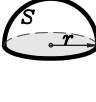
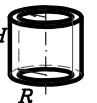
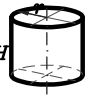


Two-dimensional figures	
<p><b>Circle - common</b> All points on the circumference of a circle are equidistant from its center.</p>  <p><math>D=2R</math> <math>l=2\pi R=\pi D</math> <math>A=\pi R^2=\frac{\pi D^2}{4}</math></p> <p>A- Area</p>	<p><b>Sector of a Circle</b> The pie-shaped piece of a circle 'cut out' by two radii.</p>  <p><math>D=2R</math> <math>l=2\pi R=\pi D</math> <math>A=\pi R^2=\frac{\pi D^2}{4}</math></p> <p>A- Area</p>
<p><b>Segment of a Circle</b> Either of the two regions into which which a secant or a chord cuts a circle</p>  <p>if <math>\alpha &lt; 180</math> <math>A=\frac{\pi R^2}{360}\alpha - A_{ABC}</math> if <math>\alpha &gt; 180</math> <math>A=\frac{\pi R^2}{360}\alpha + A_{ABC}</math></p> <p>A- Area</p>	<p><b>Arc of a Circle</b> A curved portion of a circle.</p>  <p><math>l=R\alpha\frac{\pi}{180}</math> <math>A=\frac{\pi R^2}{360}\alpha</math></p> <p>A- Area</p>
<p><b>Square</b> A quadrilateral with opposite sides parallel.</p>  <p><math>A=a^2</math> <math>A=\frac{1}{2}d^2</math> <math>P=4*a</math> <math>d=a\sqrt{2}</math></p> <p>P- Perimeter A- Area</p>	<p><b>Rectangle</b> A quadrilateral with adjacent perpendicular (all four angles are therefore right angles).</p>  <p><math>A=ab</math> <math>A=\frac{1}{2}d^2</math> <math>P=2*(a+b)</math></p> <p>P- Perimeter A- Area</p>
<p><b>Rhombus</b> A parallelogram with all sides equal</p>  <p><math>P=4*a</math> <math>A=ah</math> <math>A=a^2 * \sin\alpha</math> <math>A=\frac{1}{2}d_1*d_2</math> <math>d=a\sqrt{2}</math> <math>d_2=2a*\cos\frac{\alpha}{2}</math> <math>d_1=2a*\sin\frac{\alpha}{2}</math> <math>d_1^2+d_2^2=4a^2</math></p> <p>P- Perimeter A- Area</p>	<p><b>Parallelogram</b> A quadrilateral with opposite sides parallel.</p>  <p><math>P=2(a+b)</math> <math>A=a*h</math> <math>d_1^2+d_2^2=2(a^2+b^2)</math> <math>A=ab*\sin\alpha</math></p> <p>P- Perimeter A- Area</p>
<p><b>Trapezoid</b> A quadrilateral with at least one pair of parallel sides</p>  <p><math>P=a_1+a_2+b_1+b_2</math> <math>A=\frac{a_1+a_2}{2}h</math> <math>A=\frac{1}{2}d_1*d_2*\sin\alpha</math></p> <p>A- Area P- Perimeter</p>	<p><b>Kite</b> A quadrilateral with two pairs of distinct adjacent sides equal in length.</p>  <p><math>P=2(a+b)</math> <math>b*h=\sqrt{a^2-\frac{d_1^2}{4}}</math> <math>h+q=\sqrt{a^2-\frac{d_1^2}{4}}+\sqrt{b^2-\frac{d_2^2}{4}}</math></p> <p>P- Perimeter</p>
<p><b>Triangle - common</b> A polygon (plane figure) with 3 angles and 3 sides.</p>  <p>s- semiperimeter of the triangle: <math>s=\frac{P=a+b+c}{2}</math> <math>A=\frac{1}{2}ah_c</math> <math>A=\frac{1}{2}ab*\sin C</math></p> <p>Heron's formula <math>A=\sqrt{s(s-a)(s-b)(s-c)}</math></p> <p>A- Area P- Perimeter</p>	<p><b>Equilateral Triangle</b> A triangle with all three sides of equal length.</p>  <p><math>P=3a</math> <math>R=\frac{a\sqrt{3}}{4}</math> <math>r=\frac{a\sqrt{3}}{6}</math> <math>R=2r</math> <math>A=\frac{\sqrt{3}}{4}a^2</math></p> <p>P- Perimeter A- Area</p>
<p><b>Isosceles Triangle</b> A triangle with two sides of equal length.</p>  <p><math>P=a+2b</math> <math>A=\frac{1}{2}b^2*\sin\alpha</math> <math>A=\frac{a}{4}\sqrt{4b^2-a^2}</math></p> <p>P- Perimeter A- Area</p>	<p><b>Right Triangle</b> A triangle with one right angle.</p>  <p><math>P=a+b+c</math> <math>c=\sqrt{a^2+b^2}</math> <math>A=\frac{ab}{2}</math></p> <p>P- Perimeter A- Area</p>

Three-dimensional figures	
<p><b>Prism</b> A prism is a solid that has two parallel faces which are congruent polygons at both ends</p>  <p><math>V=A*H</math></p> <p>A- Area of base P- Perimeter of base V- Volume</p>	<p><b>Rectangular Parallelepiped</b></p>  <p><math>A=P*H</math> <math>V=A*H</math></p> <p>A- Area of base P- Perimeter of base V- Volume</p>
<p><b>Cone</b> A cone is a solid with a circular base. It has a curved surface which tapers (i.e. decreases in size) to a vertex at the top.</p>  <p><math>V=\frac{1}{3}\pi r^2 H</math> <math>S=\pi rl + \pi r^2</math></p> <p>H-Height r- Radius of base S- Surface area V- Volume l- the slant height</p>	<p><b>Frustum of a Right Circular Cone</b></p>  <p><math>V=\frac{1}{3}\pi H(R_1^2+R_2^2+R_1R_2)</math> <math>S_{tot}=\pi(R_1+R_2)*l</math> <math>S_{top}=\pi(R_1+R_2)*l</math></p> <p><math>S_{tot}</math>- Total surface area <math>S_{top}</math>- Surface area <math>R_1, R_2</math>- Radius of bases l- the slant height H-Height V- Volume</p>
<p><b>Pyramid</b> A pyramid is a solid with a polygonal base and several triangular lateral faces.</p>  <p><math>V=\frac{1}{3}A*H</math> <math>S</math>- Add the area of the base to the sum of the areas of all of the triangular faces</p> <p>A- Area of base P- Perimeter of base V- Volume S- Surface area</p>	<p><b>Frustum of a Pyramid</b> The portion of a pyramid that lies between the base and a plane cutting through it parallel to the base.</p>  <p><math>S=\frac{1}{2}(P_1+P_2)*l</math> <math>V=\frac{1}{3}(A_1+A_2+\sqrt{A_1A_2})*H</math></p> <p><math>A_1, A_2</math>- Area of bases H- Height <math>P_1, P_2</math>- Perimeter of bases l- Slant height V- Volume S- Surface area</p>
<p><b>Sphere</b> A sphere is a solid in which all the points on the round surface are equidistant from a fixed point, known as the centre of the sphere</p>  <p><math>V=\frac{4}{3}\pi r^3</math> <math>S=4\pi r^2</math></p> <p>V-Volume r- Radius of base S- Surface area</p>	<p><b>Hemisphere</b> A hemisphere is half a sphere, with one flat circular face and one bowl-shaped face.</p>  <p><math>V=\frac{2}{3}\pi r^3</math> <math>S=2\pi r^2</math></p> <p>V-Volume r- Radius of base S- Surface area</p>
<p><b>Hollow cylinder</b></p>  <p><math>S=2\pi rH+2\pi RH+2(\pi R^2-\pi r^2)</math> <math>V=\pi H(R^2-r^2)</math></p> <p>H- Height R, r- Radius of base S- Surface area V- Volume</p>	<p><b>Cylinder</b> A cylinder is a solid that has two parallel faces which are congruent circles. The line connecting the centers of the bases is called the axis.</p>  <p><math>V=\pi r^2 H</math> <math>S=2\pi r^2+2\pi rh</math></p> <p>H-Height r- Radius of base V- Volume S- Surface area</p>