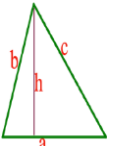
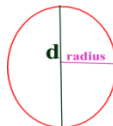
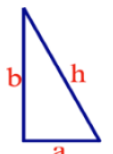
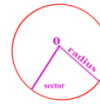
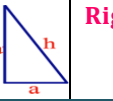
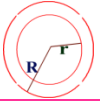
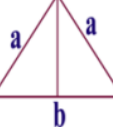
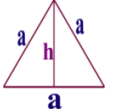

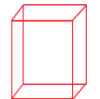
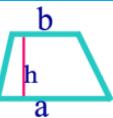
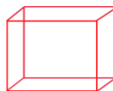
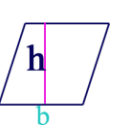
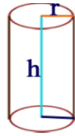
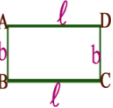

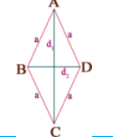

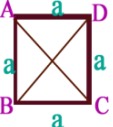




Names	perimeter c	Areas		
 Triangle Sides a, b, c height = h	$C = a + b + c$ $s = \frac{a + b + c}{2}$ $A = \sqrt{s(s-a)(s-b)(s-c)}$	$A = \frac{1}{2}bh$ $= \frac{1}{2} \times \text{base} \times \text{height}$		Circle diameter of circle - $d = 2r$ circumference of circle = $2\pi r = \pi d$ Area of circle = $A = \pi r^2 = \pi \frac{d^2}{4} = \frac{22}{7} r^2$
 Right angle Triangle Hypotenuse - h Sides(legs) - a, b	$C = a + b + h$ $h = \sqrt{a^2 + b^2}$	$A = \frac{1}{2}ab$ $= \frac{1}{2} \text{product of legs}$		Sector centre angle - x° length of arc - l, radius of circle - r area of sector = $A = \frac{x^\circ}{360^\circ} \pi r^2 = \frac{1}{2} lr$ perimeter of sector = $l + 2r$ length of arc of sector = $l = \frac{x^\circ}{360^\circ} 2\pi r$
 Right angle isoscales Triangle Hypotenuse - h Sides(legs) - a, a	$C = 2a + h$ $h = (\sqrt{2}) a$	$A = \frac{1}{2} a^2$		Area of circular ring = difference between two concentric circle areas $= \pi (R^2 - r^2) = \pi (R + r)(R - r)$
 Isoscales Triangle Sides- a, a, b	$C = 2a + b$	$A = \frac{b}{4} \sqrt{4a^2 - b^2}$	Prism : Number of lateral faces = number of sides of the base Number of total faces = number of sides of the base + 2 Number of edges of a prism = number of sides of the base × 3 sum of lengths of edges = number of sides × height + twice the perimeter of the base	
 Equilateral triangle Side - a Height - h	$C = 3a$ $h = \frac{\sqrt{3}}{2} a$	$A = \frac{\sqrt{3}}{4} a^2 = \frac{h^2}{\sqrt{3}}$	Lateral surface area of the prism = perimeter of the base × height total surface area of the prism = lateral surface area + 2 × base area volume of right prism = area of the base × height	
 Quadrilateral diagonal - d h_1, h_2 are perpendiculars on diagonal	perimeter = sum of sides	$A = \frac{1}{2} d(h_1 + h_2)$		side of cube is 'a' area of base of cube = a^2 Lateral surface area = $4 a^2$ total surface are of cube = $6a^2$ sq.units volume of cube $V = a^3$ cubic units
 Trapizium parallel sides a, b perpendicular distance between other sides - h	C = sum of sides	$A = \frac{1}{2} h(a + b)$		volume of cubiod = lbh cubic units length of the diagonal of cubiod = $\sqrt{l^2 + b^2 + h^2}$ surface area of four walls = $2h(l + b)$ sq. units
 Parallelogram length - l breadth - b height - h	$C = 2(l + b)$	$A = b \cdot h$ = base × corresponding height		Cylinder : radius 'r', height 'h' perimeter of base = $2\pi r$ base area of cylinder = πr^2 lateral surface area of cylinder = $2\pi rh$ total surface of cylinder = $2\pi r (h + r)$ volume of cylinder = $\pi r^2 h$ volume of hollow cylinder = $\pi(R^2 - r^2)h = \pi (R + r)(R - r)h$
 Recatangle Length = l, Breadth = b Diagonal = d	$C = 2(l + b)$ $d = \sqrt{l^2 + b^2}$	$A = l \cdot b$ = length × breadth		Cone height - h, Radius - r Slant height - l, $l = \sqrt{r^2 + h^2}$ Cone base area = πr^2 sq. units lateral surface area of cone = πrl sq. units total surface area of cone = $\pi r (l + r)$ sq. units Volume of cone $V = \frac{1}{3} \pi r^2 h$ cubic units
 Rhombous diagonals- d_1, d_2 side - a	$C = 4a$ $a = \frac{1}{2} \sqrt{d_1^2 + d_2^2}$	$A = \frac{1}{2} d_1 d_2$		Sphere radius - 'r' lateral surface area $A = 4\pi r^2 = \pi d^2$ volume of sphere = $V = \frac{4}{3} \pi r^3$ lateral surface area of pyramid = $\frac{1}{2} \times \text{perimeter of base} \times \text{slant height}$ volume of pyramid = $\frac{1}{3} \times \text{base area} \times \text{height}$
 Square side - a diagonal - d	$C = 4a$ diagonal = $d = \sqrt{2} a$	$A = a^2 = \frac{d^2}{2}$		Hemi sphere : half of the sphere Curved Surface Area = $A = 2\pi r^2$ Total surface area = $3\pi r^2$ volume of hemi sphere $V = \frac{2}{3} \pi r^3$ volume of hollow sphere = $V = \frac{4}{3} \pi (R^3 - r^3)$ Hemi spherical vessel outer radius - R, inner radius - r Total surface area = $\pi(3R^2 + r^2)$ volume of hemi spherical vessel = $V = \frac{2}{3} \pi (R^3 - r^3)$
Volume of water flowing through sluice = area of cross section of sluice × speed of water flowing per hour				



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