

Cylinder or prism.— $S = ph + 2A$ (122); where p = perimeter of base, h = perpendicular height, and A = area of base.

Pyramid or cone.— $S = \frac{pl}{2} + A$ (123); where l = length of slant side.

Frustum of Pyramid or Cone. $S = \frac{P+P'}{2}l + A + A'$ (124);

where P' and A' represent the perimeter and area of smaller base.

Sphere. $S = 4\pi r^2$ (125); $S = cd$ (126).

Spherical Segment. $S = 2\pi rh$ (127); where h = height of segment.

X. VOLUME OF SOLIDS.

V = volume, h = height, then,

Prism or Cylinder. $V = Ah$ (128); $A = \frac{V}{h}$ (129).

Pyramid or Cone. $V = \frac{Ah}{3}$ (130); $A = \frac{3V}{h}$ (131).

Frustum of Pyramid or Cone. $V = \frac{h}{3}(A + A' + \sqrt{AA'})$ (132), where A and A' represent the areas of the ends of the Frustum.

Sphere. $V = \frac{4\pi r^3}{3}$ (133); $r = \sqrt[3]{\left(\frac{3v}{4\pi}\right)}$ (134).

Spherical Segment. $V = \frac{\pi}{6}(3d - 2h)h^2$ (135); $V = \frac{\pi}{6}(3r^2 + h^2)h$ (136), where r = radius of base of segment, and d = diameter of sphere.

Spherical Zone. $V = (r^2 + r'^2 + \frac{1}{3}h^2)\frac{\pi h}{2}$ (137); where r and r' = the radii of the ends; for the middle zone,