

3.37 Spherical Segment

Radius of sphere: R

Radius of bases: r_1, r_2

Height: h

Area of spherical surface: S_s

Area of plane end faces: S_1, S_2

Total surface area: S

Volume: V

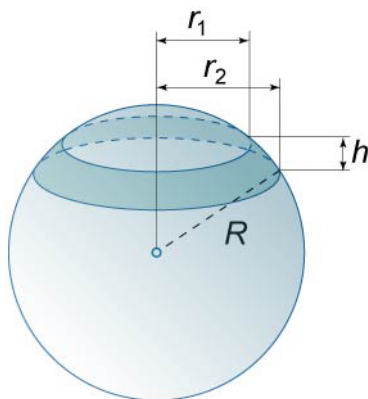


Figure 54.

349. $S_s = 2\pi Rh$

350. $S = S_s + S_1 + S_2 = \pi(2Rh + r_1^2 + r_2^2)$

351. $V = \frac{1}{6}\pi h(3r_1^2 + 3r_2^2 + h^2)$