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

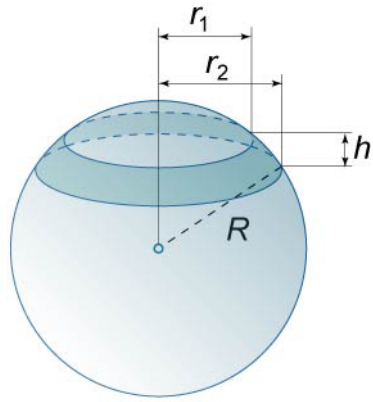

Figure 54.

349. $S_S = 2\pi Rh$

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

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