

### 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:  $V$

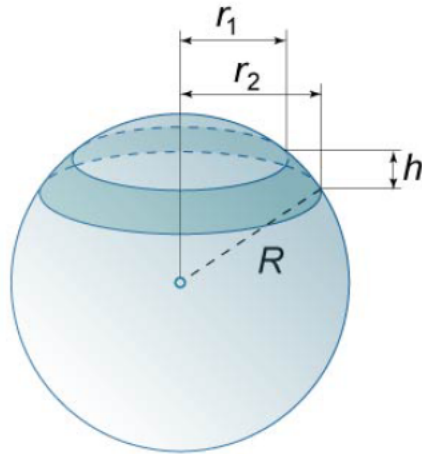


Figure 54.

**349.**  $S_s = 2\pi Rh$

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

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