3.36 Spherical Sector

Radius of sphere: R

Radius of base of spherical cap: r

Height: h

Total surface area: S

Volume: V

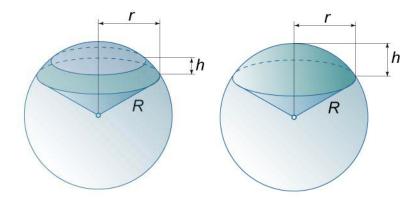


Figure 53.

347.
$$S = \pi R(2h + r)$$

348.
$$V = \frac{2}{3}\pi R^2 h$$

Note: The given formulas are correct both for "open" and "closed" spherical sector.