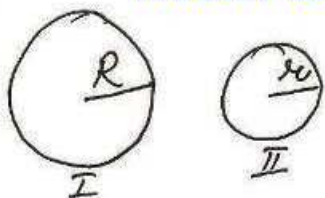


## NCERT Exemplar Solutions by (Dev Anoop)

20



$$\frac{V_1}{V_2} = \frac{64}{27}$$

$$\frac{\frac{4}{3}\pi R^3}{\frac{4}{3}\pi r^3} = \left(\frac{4}{3}\right)^3$$

$$\Rightarrow \frac{R}{r} = \frac{4}{3} \dots \textcircled{1}$$

$$\Rightarrow \frac{R^2}{r^2} = \frac{16}{9}$$

$$\Rightarrow \frac{4R^2}{4r^2} = \frac{16}{9}$$

$$\Rightarrow \frac{SA_1}{SA_2} = \frac{16}{9}$$

$$SA_1 : SA_2 = 16 : 9$$