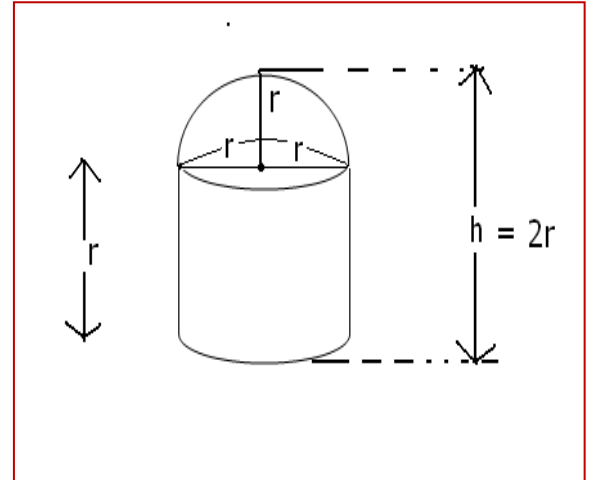


Answer 106. Volume of building

$$\begin{aligned} &= \frac{2}{3} \pi r^3 + \pi r^2 h \\ &= \frac{2}{3} \pi r^3 + \pi r^2 (r) \\ &= \frac{2}{3} \pi r^3 + \pi r^3 \\ &= \frac{5}{3} \pi r^3 \end{aligned}$$



According to problem

$$\begin{aligned} \frac{5}{3} \pi r^3 &= \frac{880}{21} \text{ m}^3 \\ \text{or } \frac{5}{3} \times \frac{22}{37} r^3 &= \frac{880}{21} \text{ m}^3 \\ r^3 &= 8 \\ r &= 2 \text{ m} \end{aligned}$$

Height of building = $2r$

$$\begin{aligned} &= 2 \times 2 \\ &= 4 \text{ m} \end{aligned}$$