

$$\begin{aligned}
 6) \text{ Volume of full cone} &= \frac{1}{3} \pi r^2 h \\
 &= \frac{1}{3} \times \pi \times 12^2 \times 10 \quad (1) \\
 &= 480\pi \quad (1)
 \end{aligned}$$

Volume of top section removed =

$$\begin{aligned}
 &\frac{1}{3} \times \pi \times 6^2 \times 5 \quad (1) \\
 &= 60\pi \quad (1)
 \end{aligned}$$

$$\begin{aligned}
 \text{Volume of frustum} &= 480\pi - 60\pi \quad (1) \\
 &= 420\pi \\
 &= 1319.4689 \text{ cm}^3 \quad (1) \\
 &= 1320 \text{ cm}^3 \text{ (3sf)} \quad (1)
 \end{aligned}$$

Total = 7

$$\begin{aligned}
 7) \text{ Vol.} \\
 \text{Area of pyramid} &= \frac{1}{3} Ah
 \end{aligned}$$

$$A = 6\text{m} \times 5\text{m} = 30\text{m}^2 \quad (1)$$

$$\begin{aligned}
 A = 30\text{m}^2 \quad \text{Volume of pyramid} &= \\
 &\frac{1}{3} \times 30 \times 9 \quad (1) \\
 &= 90\text{m}^3 \quad (1)
 \end{aligned}$$

→ Total = 3