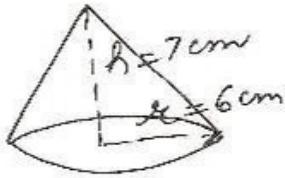
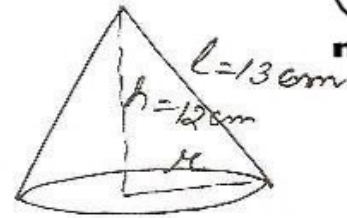


1 ①



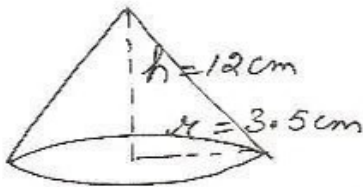
$$\begin{aligned} \text{volume} &= \frac{1}{3} \pi r^2 h \\ &= \frac{1}{3} \times \frac{22}{7} \times 6 \times 6 \times 7 \\ &= 264 \text{ cm}^3 \end{aligned}$$

Ex 13.7 2 ①



$$\begin{aligned} r &= \sqrt{l^2 - h^2} \\ &= \sqrt{13^2 - 12^2} \\ &= \sqrt{169 - 144} \\ &= \sqrt{25} \\ &= 5 \text{ cm} \end{aligned}$$

1 ①

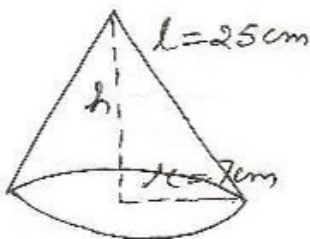


$$\begin{aligned} \text{volume} &= \frac{1}{3} \pi r^2 h \\ &= \frac{1}{3} \times \frac{22}{7} \times 3.5 \times 3.5 \times 12 \\ &= 154 \text{ cm}^3 \end{aligned}$$

$$\text{Capacity} = \frac{1}{3} \pi r^2 h$$

$$\begin{aligned} &= \frac{1}{3} \times \frac{22}{7} \times 5 \times 5 \times 12 \\ &= \frac{2200}{7} \text{ cm}^3 \\ &= \frac{2200}{7 \times 1000} \text{ l} \\ &= \frac{11}{35} \text{ l} \end{aligned}$$

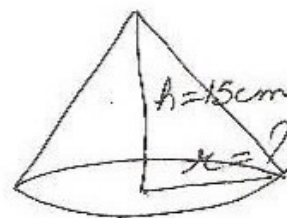
2 ①



$$\begin{aligned} h &= \sqrt{l^2 - r^2} \\ &= \sqrt{25^2 - 7^2} \\ &= \sqrt{625 - 49} \\ &= \sqrt{576} \\ &= 24 \text{ cm} \end{aligned}$$

$$\begin{aligned} \text{Capacity} &= \frac{1}{3} \pi r^2 h \\ &= \frac{1}{3} \times \frac{22}{7} \times 7 \times 7 \times 24 \\ &= 1232 \text{ cm}^3 \\ &= 1.232 \text{ l} \end{aligned}$$

③



$$\begin{aligned} \text{volume of cone} &= 1570 \text{ cm}^3 \\ \frac{1}{3} \pi r^2 h &= 1570 \\ \frac{1}{3} \times 3.14 \times r^2 \times 15 &= 1570 \\ \Rightarrow r^2 &= \frac{1570 \times 3}{3.14 \times 15} \\ \Rightarrow r &= \sqrt{100} \\ &= 10 \text{ cm} \end{aligned}$$