

$$\textcircled{3} \text{ c) } \sqrt[4]{\frac{256}{625}}$$

$$\frac{\sqrt[4]{256}}{\sqrt[4]{625}} = \frac{\sqrt[4]{\cancel{2 \times 2 \times 2 \times 2} \times \cancel{2 \times 2 \times 2 \times 2}}}{\sqrt[4]{5 \times 5 \times 5 \times 5}}$$

$$= \frac{2 \times 2}{5} = \left(\frac{4}{5}\right)$$

⑥ Given:

$$\text{Surface Area} = 13824 \text{ m}^2$$

$$\text{Volume} = ?$$

Square:

$$A = l \times w \text{ (sides are same)}$$

Cube:

$$V = l \times w \times h \text{ (sides are same)}$$

$$SA = 6(l \times w) \text{ (sides are same)}$$

① Find Area:

$$\text{Area} = \frac{S.A.}{6}$$

$$\text{Area} = \frac{13824}{6}$$

$$A = 2304 \text{ m}^2$$

② Find side length

$$\sqrt{2304} = ?$$

$$2304 \rightarrow 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3$$

$$= 2 \times 2 \times 2 \times 2 \times 3$$

$$= 48 \text{ m}$$

$$\text{length} = 48 \text{ m}$$

③ $V = l \times w \times h$ (All sides are the same)

$$V = 48 \times 48 \times 48$$

$$V = 110592 \text{ m}^3$$

$$A = l \times w$$

$$\underline{\underline{V = l \times w \times h}}$$

Given surface Area = 17496 units²

- ① Find Area: ② Find length

$$A = \frac{17496}{6}$$

$$A = 2916 \text{ units}^2$$

$$\sqrt{2916} = ?$$

$$2916 \rightarrow 2 \times 2 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$$

$$= 2 \times 3 \times 3 \times 3$$

$$= 54$$

$$\text{length} = 54 \text{ units}$$

③ $V = l \times w \times h$

$$V = 54 \times 54 \times 54$$

$$V = 157\,464 \text{ units}^3$$