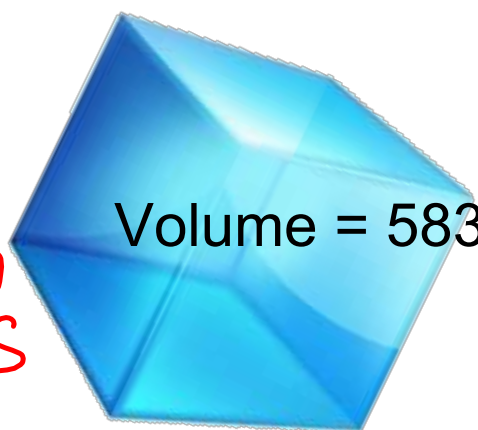


Without using the  $\sqrt{\quad}$  button on your calculator, find the edge length of the square.

$$\begin{aligned}\sqrt{576} &= 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3 \\ &= \textcircled{2 \times 2} \times \textcircled{2 \times 2} \times \textcircled{2 \times 2} \times \textcircled{3 \times 3} \\ &= 2 \times 2 \times 2 \times 3 \\ &= 24\end{aligned}$$

$$\begin{aligned}V &= l \times w \times h \\ &= S \times S \times S\end{aligned}$$



$$\text{Volume} = 5832\text{cm}^3$$

Without using the  $\sqrt[3]{\quad}$  button on your calculator, find the edge length of the cube.

$$\begin{aligned}\sqrt[3]{5832} &= 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \\ &= (2 \times 2 \times 2) \times (3 \times 3 \times 3) \times (3 \times 3 \times 3) \\ &= 2 \times 3 \times 3 \\ &= 18\end{aligned}$$

$$74088$$
$$2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 7 \times 7 \times 7$$

Perfect Cube

The image shows two mathematical expressions written in blue ink. The first expression is  $3 \times 3 \times 3 \times 3 \times 3 \times 3$  and the second is  $2 \times 2 \times 2 \times 2 \times 2 \times 2$ . Red circles are drawn around each of the six numbers in both expressions. Green circles are drawn around the entire first expression and the entire second expression.

