



we know that for prism $\text{Volume} = \text{Area of base} * \text{height}$

from this formula we have

$$\text{height} = \frac{\text{Volume}}{\text{Area of base}}$$

We know that

$$\text{Volume} = 1440 \text{cm}^3$$

In our case base is right triangle ABC

$$\text{area}(ABC) = 0.5 * AC * BC = 0.5 * 15 * 8 \text{cm}^2 = 60 \text{cm}^2$$

$$\text{height} = \frac{1440 \text{cm}^3}{60 \text{cm}^2} = 24 \text{cm}$$

so height = 24 cm