TASK **3.7**

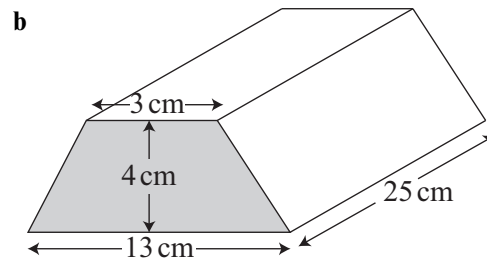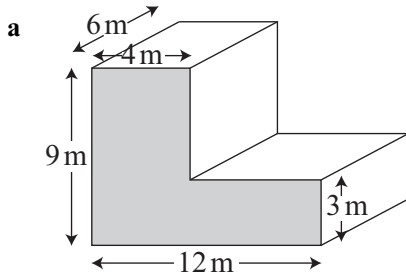> **Remember** $1 \text{ m}^3 = 1000 \text{ l} = 1\,000\,000 \text{ cm}^3$
> $1 \text{ m}^2 = 10\,000 \text{ cm}^2$

1. Find the volume of each prism below:

   a

   b

2. Which is the greater amount? $7 \cdot 2 \text{ m}^3$ or $7\,090\,000 \text{ cm}^3$

3. True or false? $6 \cdot 3 \text{ m}^2 = 630 \text{ cm}^2$

4. A rectangular tank has a length of 8 m and a width of 6 m. How high is the tank if it can hold 240 000 litres of water when full?

5. Copy and complete

   a $4 \text{ m}^3 = \square \text{ cm}^3$ **b** $2 \cdot 9 \text{ m}^3 = \square \text{ cm}^3$ **c** $8 \text{ m}^2 = \square \text{ cm}^2$

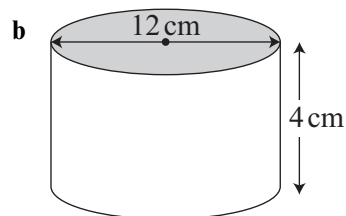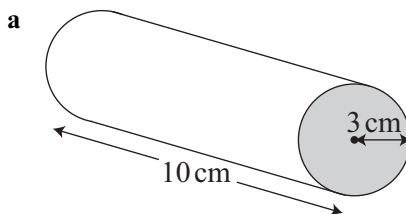   **d** $7 \cdot 48 \text{ m}^2 = \square \text{ cm}^2$ **e** $6\,000\,000 \text{ cm}^3 = \square \text{ m}^3$ **f** $6 \text{ m}^3 = \square \text{ litres}$

   g $6\,000\,000 \text{ cm}^2 = \square \text{ m}^2$ **h** $5 \cdot 16 \text{ m}^3 = \square \text{ litres}$ **i** $38\,000 \text{ cm}^2 = \square \text{ m}^2$

6. Find the 'exact' volume of each prism below, leaving your answers in terms of π.

   a

   b

7. A pipe of diameter 8 cm and length 3 m is half full of water. How many litres of water are in the pipe?