

Exercise 2015-7EN-00002(2)

(1) Convert the following to the unit as indicated in brackets:

- (a) $30 \text{ m}^2 (\text{cm}^2)$ (b) $55 \text{ cm}^3 (\text{mm}^3)$ (c) $2 \text{ m}^3 (\text{cm}^3)$
(d) $15 \text{ m}^3 (\text{m}^3)$ (e) $740 \text{ mm}^3 (\text{cm}^3)$ (f) $8,5 \text{ m}^3 (\text{cm}^3)$
(g) $4\,000\,000 \text{ cm}^3 (\text{m}^3)$ (h) $155 \text{ m}^2 (\text{mm}^2)$ (i) $10,75 \text{ m}^3 (\text{cm}^3)$

(2) Calculate how many liters each of the following volumes contain:

- (a) 750 000 cm³
- (b) 7 kℓ

(3) Calculate how many milliliters each of the following volumes contain:

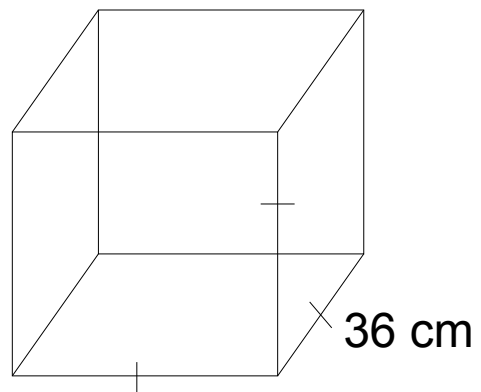
- (a) $9\,000 \text{ mm}^3$
- (b) $0,5 \text{ m}^3$ (first convert to cm^3)

(4) Calculate the volume of the rectangular prisms with the following measurements:

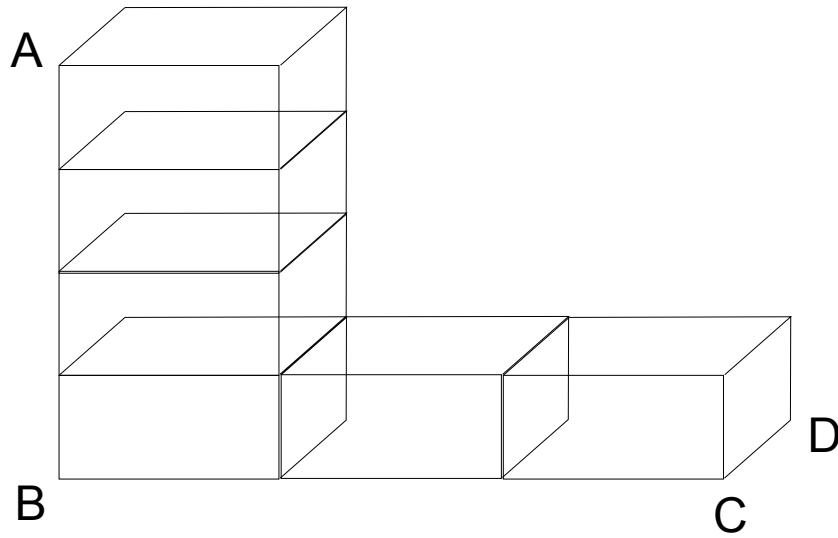
- (a) $L = 23 \text{ cm}$; $B = 14 \text{ cm}$ and $H = 12 \text{ cm}$
- (b) $L = B = H = 17 \text{ mm}$
- (c) $L = 1,1 \text{ m}$; $B = H = 0,4 \text{ m}$
- (d) $L = 130 \text{ mm}$; $B = 5 \text{ cm}$ and $H = 0,6 \text{ m}$

(5) Consider the prism:

- Which type of prism is this?
- Calculate the volume of the prism.
- How many liters does the prism contain?



- (6) The figure consists of a number of bars of the same size.
 $AB = 120 \text{ cm}$; $CD = 40 \text{ cm}$ and $BC = 360 \text{ cm}$



- (a) Calculate the length, breadth and height of each bar.
- (b) Calculate the volume of one bar.
Show all calculations!
- (c) Calculate the volume of the figure.
- (d) Convert the volume to mm^3 .