

QT Scale Drawings and Maps



1. Xavier is making a model car using a scale of 1:20.

(a) The length of the model car is 8cm. Work out the length of the real car. Give your answer in metres. (2 marks)

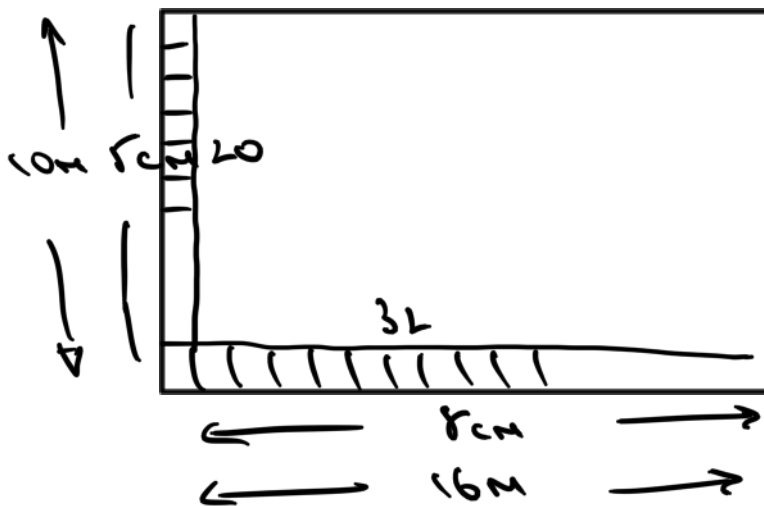
$$\begin{array}{l} \times 20 \quad (1 : 20) \quad \times 8 \\ 8 : 160 \text{ cm} \end{array} = \underline{\underline{1.6 \text{ m}}}$$

(b) The width of the real car is 1.2m. Work out the width of Xavier's model. Give your answer in cm. (2 marks)

$$\begin{array}{l} \times 6 \quad (1 : 20) \quad \times 6 \\ 6 : 120 \end{array}$$

6 cm in width.

2. Here is a scale drawing of Josh's garden. He would like to cover the garden using concrete paving slabs. Each slab is 50cm x 50cm. How many slabs will Josh need to completely cover the garden? 0.5×0.5 (3 marks)



$$1 \text{ cm} = 2 \text{ m}$$

$$\begin{array}{l} \text{Total } 32 \times 20 \\ = \underline{\underline{640 \text{ slabs}}} \end{array}$$

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8cm x 4cm

7. Draw a scale drawing of a room 4m x 2m. Use a scale of 1cm = 0.5m.

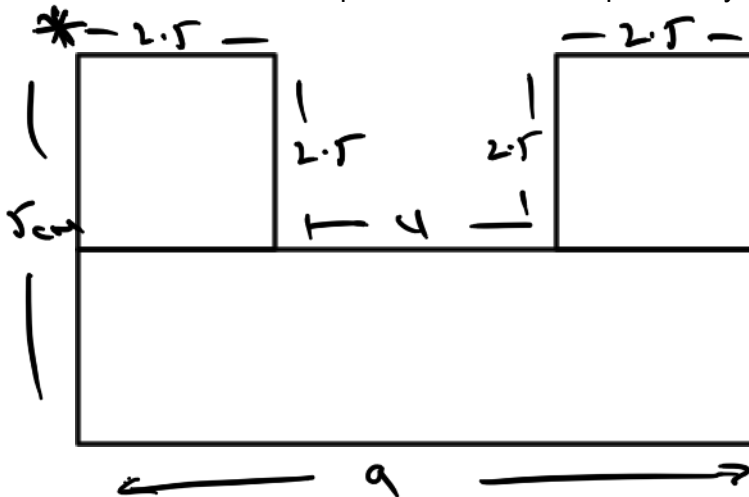
(2 marks)



Scale
1cm : 0.5m

8. Calculate the real perimeter of this shape. Give your answer in metres.

(3 marks)



Scale 2cm = 5m

Total cm

$$5 + 2.5 + 2.5 + 4 + 2.5 + 2.5 + 5 + 9 + 5 = 33 \text{ cm}$$

$$\begin{aligned} & \times 16.5 \quad \left. \begin{array}{l} 2 : 5 \\ 33 : 82.5 \end{array} \right\} \times 16.5 \\ & \underline{\underline{82.5 \text{ m}}} \end{aligned}$$

Total

/ 24 marks