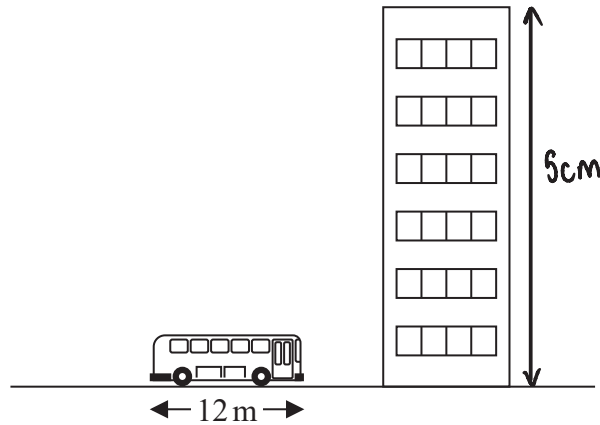


1.



The picture shows a bus next to a building.  
The bus has a length of 12m.

The bus and the building are drawn to the same scale.

Work out an estimate for the height, in metres, of the building.

$$\begin{aligned} 2\text{cm} &= 12\text{m} \\ (\div 2) & \quad (\div 2) \\ 1\text{cm} &= 6\text{m} \end{aligned}$$

$$\begin{aligned} 1\text{cm} &= 6\text{m} \\ \downarrow \times 5 \\ 5\text{cm} &= 30\text{m} \end{aligned}$$

..... 30 m

(Total for Question is 2 marks)

2. The diagram shows a **scale drawing** of a tennis court.

(11.3 → 11.7) 11.5 ① measured with a ruler

(5.6 → 6.0)  
5.8 cm



The **scale** of the drawing is **1:200** 1 cm on paper = 200 cm in real life

Work out the **perimeter** of the **real** tennis court.

Give your answer in **metres**.

Finding actual dimensions:

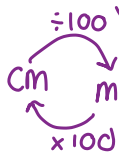
$$\text{width: } 5.8 \times 200 = 1160 \text{ cm } ①$$

$$\text{length: } 11.5 \times 200 = 2300 \text{ cm}$$

Perimeter of real rectangle:

$$\begin{aligned} (2 \times \text{width}) + (2 \times \text{height}) &= (2 \times 1160) + (2 \times 2300) \\ &= 6920 \text{ cm } ① \end{aligned}$$

Converting into metres:



$$6920 \div 100 = 69.2 \text{ m } ①$$

Answer range:  
67.6 → 70.8

..... 69.2 ① ..... metres

(Total for Question is 5 marks)

3. The length of a plane is 19.2 metres.

Lukas buys a scale model of the plane.

The scale of the model is 1 : 24

Work out the length of the scale model of the plane.

Give your answer in centimetres.

$$1 \text{ m} = 100 \text{ cm}$$

$$\begin{array}{l} \times 19.2 \downarrow \\ 19.2 \text{ m} = 1920 \text{ cm} \end{array} \quad \textcircled{1}$$

$$\frac{1920}{24} = 80 \text{ cm}$$

80<sup>①</sup>

..... centimetres

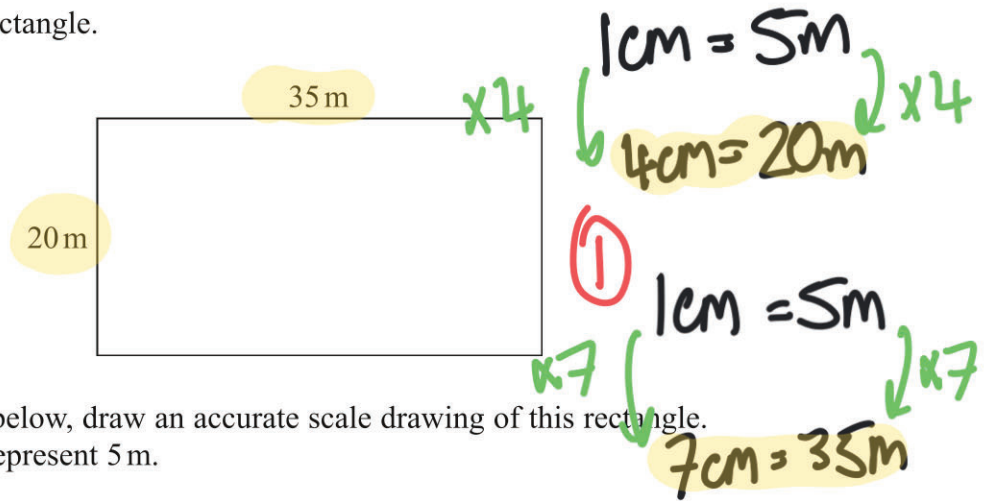
$$\begin{array}{l} \pounds 4500 \times 1.8\% \\ \pounds 4500 \times 0.018 \\ = \pounds 81 \end{array} \quad \begin{array}{l} \text{convert \%} \\ \text{to decimal by} \\ \div 100 \end{array} \quad \frac{1.8}{100} = 0.018$$

Each year get  $\pounds 81$  in interest

$$\pounds 81 \times 3 = \pounds 243$$

243<sup>①</sup>

4. The diagram shows a rectangle.



On the centimetre grid below, draw an accurate scale drawing of this rectangle.  
Use a scale of 1 cm to represent 5 m.

