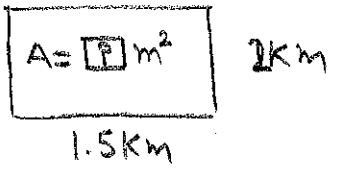
Units of Area and Volume

Learning Outcome – Conversion b/w units for Area

Ex. (1a/61)



Sol. We want to determine area of given rectangle in square metres (m^2).

Firstly, we will convert width and length of this rectangle into metres, and then multiply them to get area in square metres.

1.5 Km → m

Step.1. $\frac{1.5\text{Km}}{1} \times \frac{\square\ \text{m}}{\square\ \text{Km}}$

Step.2. 1Km = 1000m

Step.3. $\frac{1.5\text{Km}}{1} \times \frac{1000\ \text{m}}{1\ \text{Km}}$

$= \frac{1.5\ \cancel{\text{Km}}}{1} \times \frac{1000\ \text{m}}{1\ \cancel{\text{Km}}}$

$= 1500\ \text{m}$

2Km → m

Step.1. $\frac{2\text{Km}}{1} \times \frac{\square\ \text{m}}{\square\ \text{Km}}$

Step.2. 1Km = 1000 m

Step.3. $\frac{2\text{Km}}{1} \times \frac{1000\ \text{m}}{1\ \text{Km}}$

$= \frac{2\ \cancel{\text{Km}}}{1} \times \frac{1000\ \text{m}}{1\ \cancel{\text{Km}}}$

$= 2000\ \text{m}$

Now, Area (in metres) = 1500 m × 2000 m = $3000000\ m^2$

1-G (P. 61)