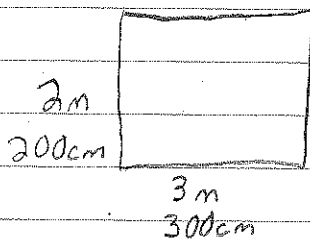


Square Unit Conversion



$$\begin{aligned} A &= lw \\ &= 2 \times 3 \\ &= 6 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} A &= lw \\ &= 200 \times 300 \\ &= 60000 \text{ cm}^2 \end{aligned}$$

When converting square measurements you need to square the conversion factor

ex

$$\begin{aligned} 1 \text{ m} &= 100 \text{ cm} \\ 1 \text{ m}^2 &= 100^2 \text{ cm}^2 \\ &= 10000 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} 1 \text{ in} &= 2.54 \text{ cm} \\ 1 \text{ sq in} &= 2.54^2 \text{ cm}^2 \\ &= 6.45 \text{ cm}^2 \end{aligned}$$

A room has an area of 40 m^2 what is this in square yards?

$$1 \text{ yd} = 0.9144 \text{ m}$$

$$\begin{aligned} 1 \text{ sq yd} &= 0.9144^2 \text{ m}^2 \\ &= 0.8361 \text{ m}^2 \end{aligned}$$

$$\frac{1 \text{ sq yd}}{0.8361 \text{ m}^2} = \frac{x \text{ sq yd}}{40 \text{ m}^2} \quad 40 \times 1 \div 0.8361 = 47.84 \text{ sq yds}$$