Unit 108: Wood occupations

# Worksheet 23: Arithmetic and area and cube (tutor)

1. Fill in the missing information.

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| --- | --- | --- | --- |
| **Imperial** |  |  | **Metric (mm)** |
| 3’ (3 feet) | = |  | 914.4mm |
| 8’ | = |  | 2438.4mm |
| 4’ (4 feet) | = |  | 1219.2mm |
| 8” | = |  | 203.2mm |
| 4” (4 inches) | = |  | 101.6mm |
| 3.28084 feet | = |  | 1000mm |

1. Complete the following calculations.

|  |  |
| --- | --- |
| **Scenario:** | **How much is required?** |
| A carpenter is fitting flooring to a space measuring 4800mm x 3600mm. The TGV boards supplied are 1200mm x 600mm fitted. How many boards will be required to cover the floor? | 24 boards  17.28 m² ÷ 0.72m² |
| A rectangular room has two walls measuring 6m and a diagonal measurement of 10m.  What is the overall area of the room? | 6m x 8m = 48m² |
| How many cubic metres are 20 lengths of: 3m x 150mm x 50mm timber? | 0.0225 x 20 = 0.45m³ |
| A room has two sections. A rectangular section 2.6m x 2.8m and a triangular section with a right angle 4.6m x 3.2m x 5.6m.  Which section is larger?  What is the total floor area? | The triangular section requires 7.36m²  The rectangular section requires 7.28m²  Total floor area = 14.64m² |
| If the above flooring was 20mm thick how many cubic metres would be required? | 0.2828m³ |

1. What is the area in metres of the floorspace shown? 3.52m

3200mm

1100mm

1. What is the area in metres of the floorspace shown? 1.76m

3200mm

1100mm