

Wood Manufacturing & Finishing Introduction

Phase 4

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Wood Manufacturing and Finishing

- Topics covered in Modules 1,2 & 3.
- Perimeters and Areas
- Pythagoras' Theorem
- Transformation of Formulae
- Cutting lists for various items
- Costings & percentage waste
- Ratio & Proportion
- Bar Charts / Pie Charts
- Simple Interest
- Depreciation

Basic rule of thumb for any maths question

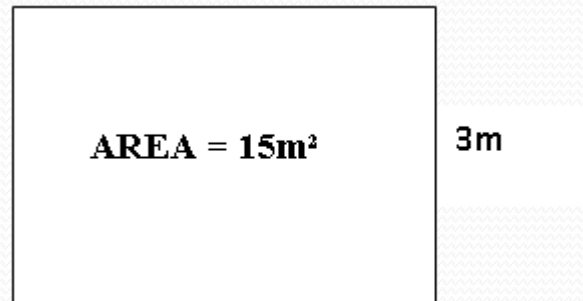
- **Write Down Formula**
- **Put in what you know**
- **Calculate the answer** (There can only be one unknown quantity in any formula)
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- **Example:** Calculate the area of the following rectangle.

- **Formula :**
- Length x Height = Area
- $5 \times 3 = \text{Area}$
- $5 \times 3 = 15$
- **Answer = 15m^2**



Transformation Of Formulae

- Basic rule of thumb for any maths question still applies:
- **Write Down Formula**
- **Put in what you know**
- **Calculate the answer** (There can only be one unknown quantity in any formula)
-
- **Example:** Calculate the area of the following rectangle.



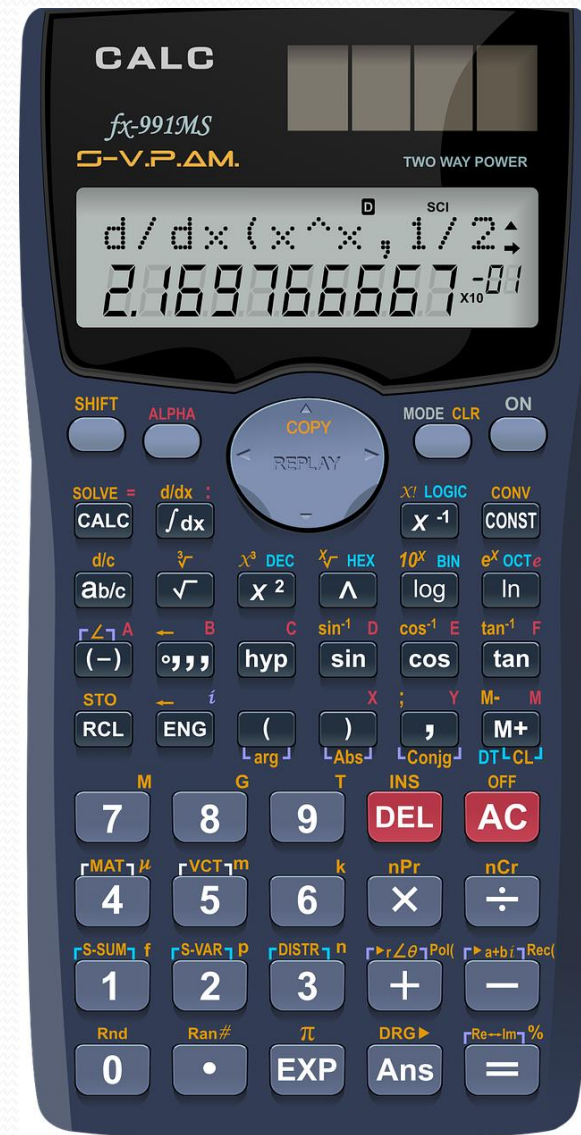
- **Formula :**
- Length x Height = Area
- Length x 3 = 15
- (we need to get the unknown quantity on it's own)
- Length = $15 \div 3$
- Answer = 5m

In all Math Questions

- Always write down the formula.
- If you write down a question line by line and work through it there is less chance of making a mistake.
- Always work in full units (e.g. change out of mm to metres)
- Always state what unit the answer is in (e.g. for area it will be m^2)
- **And most important**
- If you don't know or are unsure about anything – ask!

Calculators

- Different models of calculators have 2nd function buttons in different places. On this model it is the SHIFT button
- Make sure that you become familiar with them by carrying out simple or known calculations.
- Be careful pressing the equals button too many times.
- Inverse Cos or Cos^{-1} press SHIFT Cos to convert decimal number to degrees.



Wood Manufacturing and Finishing Week 1

- Topics covered this week
- Perimeters
- Areas
- Transformation of Formulae
- Pythagoras's Theorem
- Method:
- PowerPoint Demonstrations
- Worksheets
- Discussion of answers
- Answers for worksheets will also be provided so Learners are expected to practice methods outside of class to prepare for assessment in week 10.

Content On Website Week 1 Page

- PowerPoint on Perimeters
- PowerPoint on Areas
- PowerPoint on Transformation of Formulae
- PowerPoint on Pythagoras Theorem
- Formulas as they appear in Log Tables
- PowerPoint on sample questions and solutions
- Area and Perimeters 1
- Revision Circles
- Answers to all questions included at the end of PDF.
- Website <http://wmfmaths.yolasite.com/>

You walk into a shop and purchase the following:

- 2 litres of milk @ €1.59 1.59
 - $\frac{1}{2}$ a dozen oranges @ 45 cent each 2.70
 - 3 bars of chocolate @ 79 cent each on a buy 3 for the price of 2 offer. 1.58
 - **How much will this cost?** **5.87**
 - You hand over a €20 note and ask for a lotto ticket with quick pick for €4.
 - **How much change should you get?** **€10.13**
- How much of the lotto win will you pass on to me for reminding you to play?