Making measurements

**Work book**

**Developed in 2011-2012 for the WELL Program**

DRAFT VERSION

October 11



**Supporting:**

*MSAPMOPS101A  
Make measurements*

Making measurements

Workbook

Containing print-version written assignments supporting the unit of competency:

***MSAPMOPS101A: Make measurements***

These assignments are also available in an electronic ‘Word’ version, downloadable from the Kitchen and Bathroom Cabinetmaking website at:

[www.kbcabinetmaking.com.au](http://www.kbcabinetmaking.com.au)



Developed by Workspace Training for the 2011-2012

Workplace English Language and Literacy (WELL) Program

Kitchen and Bathroom Cabinetmaking resource development project



[www.workspacetraining.com.au](http://www.workspacetraining.com.au)

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# The assessment process

Kitchen and bathroom cabinetmaking is a practical trade that requires good hands-on skills and a sound knowledge of construction methods. Your assessor will use a range of methods to assess your ‘competence’ in the units that make up this qualification.

These may include:

* on-the-job discussions about how you go about particular workplace activities
* learning activities undertaken while you’re progressing through the unit
* practical demonstrations of your ability to use certain pieces of equipment competently and safely
* examples of products you have made and documents you have completed
* written assignments contained in the Workbooks.

The assignments contained in this Workbook are only a part of the overall assessment process for the unit. However, they are an essential part, because they allow you to demonstrate your understanding of the concepts and principles behind the skills involved.

Your assessor will talk to you about the other activities and practical demonstrations you’ll need to carry out and the timetable for completion.

### Literacy and numeracy skills

Literacy is the ability to read and write. To complete this trade qualification, you will need sufficient literacy skills to fill in forms and other types of workplace documents correctly. You will also need the skills to be able to read and understand workplace documents such as order sheets, project briefs and safe operating procedures.

Numeracy is the ability to work with numbers. Cabinetmakers need to do lots of calculations with measurements and quantities, so there will be many opportunities for you to learn and practice your numeracy skills.

When it comes to completing the written assignments for this qualification, a certain level of literacy ability is required to read the questions and write down your answers. Obviously, it’s important that you clearly understand what the assignment is asking you to do, and that your answers are a good reflection of what you really know. So if you’re having trouble reading the questions or writing down your answers, make sure you speak to your trainer before you hand the assignment in.

There are various ways your trainer can help you. For example, they may be able to ask the assignment questions verbally and help you to write down your answers. They may also be able to show you sample answers to similar questions, which will let you look at the way they’re written and give you hints on how to write your own. You may also be allowed to do the assignment with the assistance of another person.

### Applying for RPL

RPL stands for **Recognition of Prior Learning. It is a** form of assessment that acknowledges the skills and knowledge you have gained through:

* on-the-job experience
* formal training in other courses
* life experience, through your hobbies or other outside activities.

If you believe that you are already competent in some or all of the skills covered in this unit, ask your assessor about how to apply for RPL.

You’ll find an RPL checklist for this unit on the Kitchen and Bathroom Cabinetmaking website.

# Completing the assignment

There is one written assignment for the unit *Making measurements*.

This is shown on the following pages, in a layout suitable for hand-written answers. You should detach the assignment from the workbook when you have finished it and hand it to your trainer for marking.

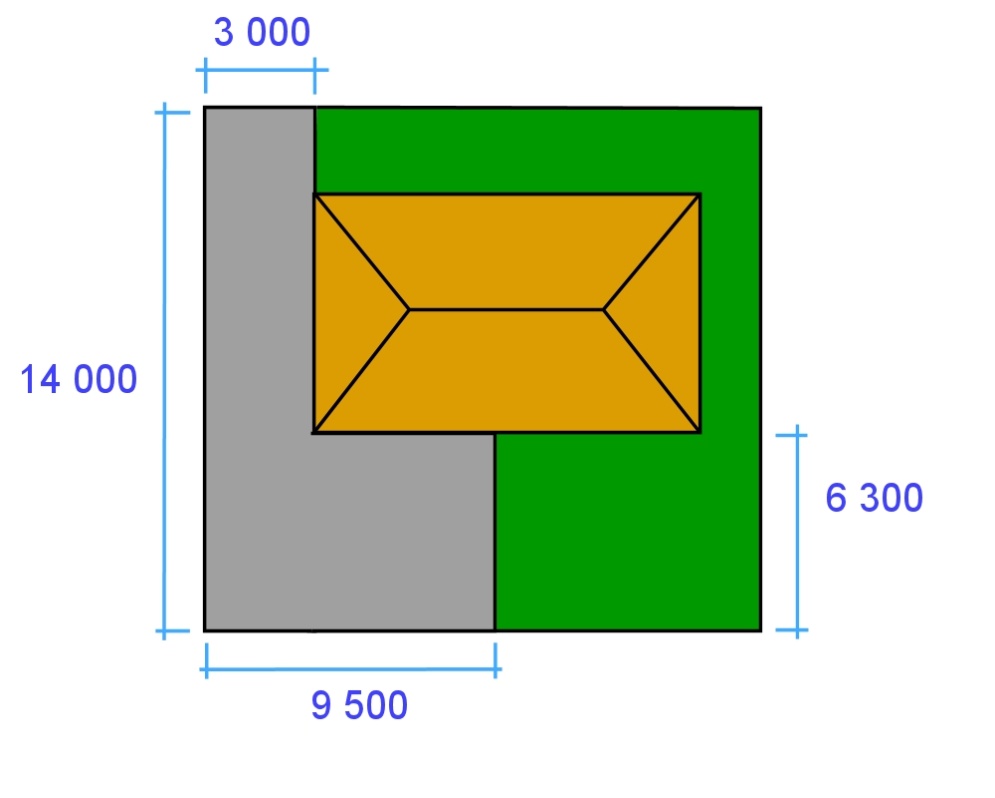
If you prefer to complete the assignment on your computer, go to the website version of this unit and look for the *Assignment* link at the end of Section 2. This will allow you to save your answers in an electronic file, which can either be printed out as a hard copy or emailed direct to your trainer as an attachment.

Before you begin the assignment, make sure you read the information in the Learner Guide or on the website for this unit. You’ll find a page relating to the assignment that summarises the questions and provides extra material and pointers to help you complete them.

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| Assignment |

Answer the questions below, and show all workings in your calculations.

1. You have decided to put in a concrete driveway and rear carport at your house. You have submitted the plan as shown below to the council.



1. What is the surface area of concrete in square metres?

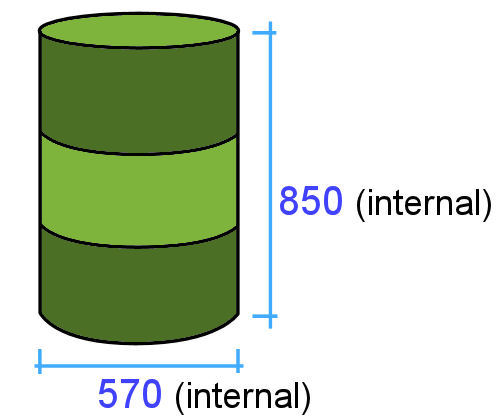
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1. If the slab is 100 mm thick, how many cubic metres of concrete will there be?

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1. If you allow an extra 10% for minor variations in thickness, how much concrete will you order from the supplier?

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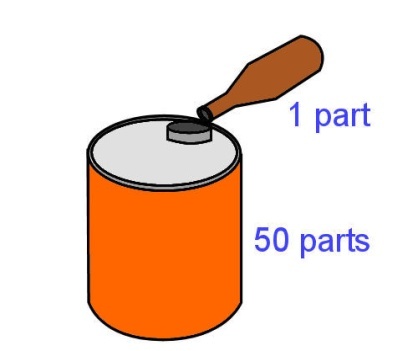
2. A 44 gallon drum has an internal diameter of 570 mm and height of 850 mm.

1. What is the drum’s capacity in litres?   
   (Use the measurements shown to calculate   
   the volume.)

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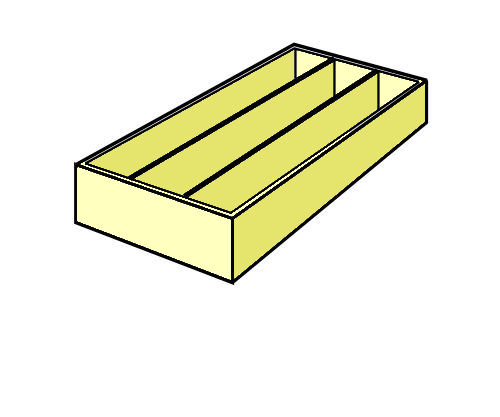
(b) If you filled the drum with water, what would the total weight be? (Water weighs 1 tonne per m3, and the drum itself weighs 10 kg.)

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3. Your chainsaw uses high grade two-stroke oil in a 50:1 ratio with petrol.

If the fuel container holds 5 litres of petrol, how much oil will you need to add?

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4. You are about to put a plywood back on a set of bookshelves.

(a) How will you check with a tape measure whether all four corners of the bookshelf are square?

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5. Choose one measuring instrument that requires calibration, or setting to zero, before it is used.

(a) What is the instrument called?

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(b) What does it measure?

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(c) What is the process of calibrating the instrument?

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(d) What would happen if you took a measurement when the instrument was not calibrated correctly?

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