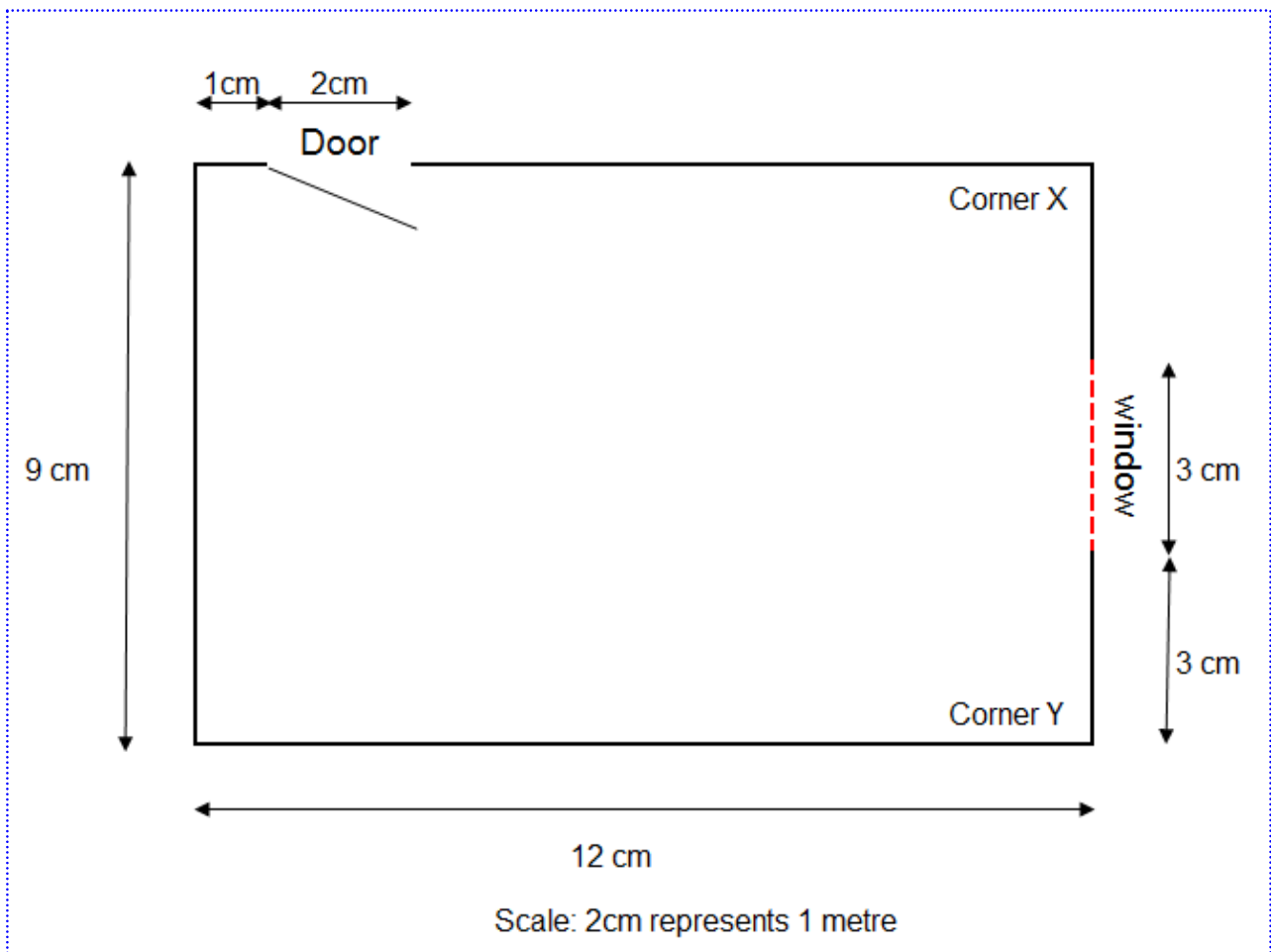


Fitting a Bathroom

The bathroom below needs to be fitted



Find below the drawing of the bathroom (not drawn to scale)



Fitting a Bathroom

You must show all your working out and evidence that you have checked your work.

Use the information on the diagram to answer the questions below:

Task 1

1. What is the actual length and width of the bathroom?
2. The wash hand basin unit (vanity unit) is to be fitted between the door and the corner marked X. How long is this length in the drawing?
3. If the bath tub is 1.7m long and 700mm wide, calculate the area of the bath tub.
4. How much water will you require to fill the bath tub if it is 80cm deep?

Fitting a Bathroom

You must show all your working out and evidence that you have checked your work.

Task 2

Your customer requested a new bathroom suite with the following specifications:

- Bath that is at least 1700mm x 700mm
- Full height pedestal with basin: 800mm high or more
- Lever or Dual flush WC: 650mm x 380mm x 795mm

a) Find the **cheapest** deal for your client from the deals below.

Explain the reasons for your answers

Model	Price	Special offer	Dimensions (mm)
Falmouth 	 £412.22	£130 off when paid for with cash	Bath: 1800 x 700 Basin: 500 (L), 805 (h) Dual flush WC
Vicky 	 £620	50% off all Vicky bath suites	Bath: 1700 x 700 Basin: 500 (L), 815 (h) Dual flush WC
Quickline 	 £578 only	1/5 off all bath suites	Bath: 1700 x 700 Basin: 500 (L), 795 (h) Dual flush WC
Price Busters 	 £225 only	Unbeatable prices	Bath: 1700 x 700 Basin: 500 (L), 695 (h) Dual flush WC
Vantage 	 £550 only	15% off on all purchases	Bath: 1650 x 700 Basin: 500 (L), 695 (h) Lever Cistern flush WC

b) Calculate the average price and the range of prices for the listed bathroom suites.

Fitting a Bathroom

Functional Skills criteria – highlighting indicates main skills covered in this resource, although these will vary with the student group and how the resource is used by the teacher. The process skills are key to Functional Maths and must always be developed and stressed during teaching.

Process Skills (all levels)		
Representing – selecting the mathematics and information to model a situation	Analysing – processing and using mathematics	Interpreting – interpreting and communicating the results of the analysis
Skill Standards (Level 2)		
<ul style="list-style-type: none"> understand routine and non-routine problems in familiar and unfamiliar contexts and situations identify the situation or problems and identify the mathematical methods needed to solve them choose from a range of mathematics to find solutions 	<ul style="list-style-type: none"> apply a range of mathematics to find solutions use appropriate checking procedures and evaluate their effectiveness at each stage 	<ul style="list-style-type: none"> interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations draw conclusions and provide mathematical justifications
Skill Standards (Level 1)		
<ul style="list-style-type: none"> understand practical problems in familiar and unfamiliar contexts and situations, some of which are non-routine identify and obtain necessary information to tackle the problem select mathematics in an organised way to find solutions 	<ul style="list-style-type: none"> apply mathematics in an organised way to find solutions to straightforward practical problems for different purposes use appropriate checking procedures at each stage 	<ul style="list-style-type: none"> interpret and communicate solutions to practical problems, drawing simple conclusions and giving explanations
Coverage and Range statements (indicative only)		
<p>Coverage and range statements provide an indication of the type of mathematical content candidates are expected to apply in functional contexts. Relevant content can also be drawn from equivalent National Curriculum levels & Adult Numeracy standards.</p>		
Level 2		
<ul style="list-style-type: none"> understand and use positive and negative numbers of any size in practical contexts carry out calculations with numbers of any size in practical contexts, to a given number of decimal places understand, use and calculate ratio and proportion, including problems involving scale understand and use equivalences between fractions, decimals and percentages understand and use simple formulae and equations involving one or two operations 	<ul style="list-style-type: none"> recognise and use 2D representations of 3D objects find area, perimeter and volume of common shapes use, convert and calculate using metric and, where appropriate, imperial measures collect and represent discrete and continuous data, using information and communication technology (ICT) where appropriate use and interpret statistical measures, tables and diagrams, for discrete and continuous data, using ICT where appropriate. use statistical methods to investigate situations use probability to assess the likelihood of an outcome 	
Level 1		
<ul style="list-style-type: none"> understand and use whole numbers and understand negative numbers in practical contexts add, subtract, multiply and divide whole numbers using a range of strategies understand and use equivalences between common fractions, decimals and percentages add and subtract decimals up to two decimal places solve simple problems involving ratio, where one number is a multiple of the other use simple formulae expressed in words for one- or two-step operations 	<ul style="list-style-type: none"> use data to assess the likelihood of an outcome solve problems requiring calculation, with common measures, including money, time, length, weight, capacity & temperature convert units of measure in the same system work out areas and perimeters in practical situations construct geometric diagrams, models and shapes extract and interpret information from tables, diagrams, charts and graphs collect and record discrete data and organise and represent information in different ways find mean and range 	

References: Ofqual (2009), *Functional Skills criteria for Mathematics: Entry 1, Entry 2, Entry 3, level 1 and level 2*. <http://www.ofqual.gov.uk/files/2009-11-functional-skills-criteria-for-mathematics.pdf>
Further functional skills documents available at <http://www.ofqual.gov.uk/>