

Surname						Other Names					
Centre Number						Candidate Number					
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For Examiner's Use
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Functional Skills Certificate  
January 2009



**MATHEMATICS (PILOT)**  
**Functional Mathematics Level 1**  
**Section A (Functionality)**

9305/A

Wednesday 14 January 2009 1.30 pm to 2.15 pm

<p><b>For this paper you must have:</b></p> <ul style="list-style-type: none"> <li>• a calculator</li> <li>• mathematical instruments</li> <li>• a treasury tag</li> <li>• a copy of the Data Sheet (examination) (enclosed).</li> </ul>	
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Section A		Section B	
Question	Mark	Pages	Mark
1		2–3	
2		4–5	
3		6–7	
Total Section A			
Total Section B			
TOTAL			
Examiner's Initials			

Time allowed for Section A: 45 minutes

**Instructions**

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Answers written in margins or on blank pages will not be marked.
- Use a calculator where appropriate.
- Do all rough work in this book. Cross through any work that you do not want to be marked.
- This paper is divided into two sections: Section A and Section B.
- After the 45 minutes allowed for Section A, you must put your calculator on the floor under your seat. You will then be given Section B.
- When you have answered Section B you may work again on Section A but you may **not** use your calculator. It must remain on the floor under your seat.
- At the end of the examination tag Section A and Section B together with Section A on top.

**Information**

- The maximum mark for Section A is 25.
- The marks for questions are shown in brackets.
- You may ask for more answer paper, tracing paper and graph paper. These must be tagged securely to this answer book.

**Advice**

- In all calculations, show clearly how you work out your answer.



J A N 0 9 9 3 0 5 A 0 1

Answer **all** questions in the spaces provided.

**1 London Eye**

You will need to use the **Data Sheet for London Eye** to answer this question.

**1 (a)** In which year did work start on building the London Eye?

.....

Answer ..... (1 mark)

**1 (b)** How many passengers can safely be carried on the London Eye when all the capsules are full?

.....

.....

Answer ..... (2 marks)

**1 (c)** A group of 110 students are going on the London Eye.

What is the smallest number of capsules needed?

.....

.....

Answer ..... (2 marks)



1 (d) Ann joins the queue at 10.25 am.  
She waits in the queue for 20 minutes before she goes on the London Eye.

At what time does she complete her ride?

.....  
.....  
.....

Answer ..... (2 marks)

1 (e) A family of two adults and one child book tickets for the London Eye.  
They book their tickets on-line.

How much do they save?

.....  
.....  
.....  
.....  
.....

Answer £ ..... (3 marks)

10

Turn over for the next question

Turn over ►



## 2 Activity Holidays

You will need to use the **Data Sheet for Activity Holidays** to answer this question.

- 2 (a) What is the accommodation price for a child staying for one night in Summer?

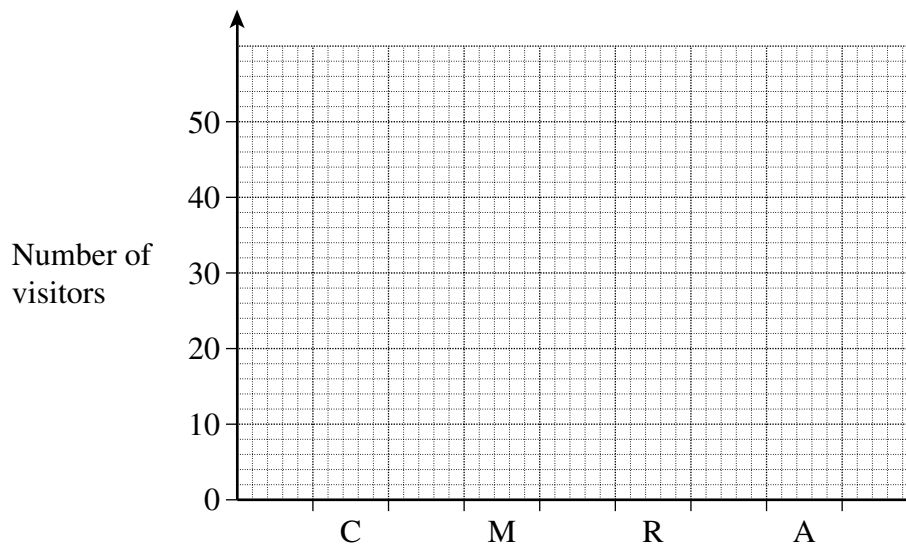
Answer £ ..... (1 mark)

- 2 (b) One hundred visitors to Lakehouse were asked to choose their favourite activity.

The table shows the results.

Activity	Number of visitors
Canoeing (C)	20
Mountain walking (M)	26
Raft building (R)	44
Abseiling (A)	10

Draw a bar chart to show this information.



(2 marks)



2 (c) Mr and Mrs King and their two children plan to stay for two nights in Spring. Each member of the family wants to do one full day activity. Mr King says that £400 will be enough to pay for this.

Is he correct?  
You **must** show your working.

.....

.....

.....

.....

.....

.....

.....

.....

.....

(4 marks)

7

Turn over for the next question

Turn over ►



**3 How much water do you use?**

You will need to use the **Data Sheet for How much water do you use?** to answer this question.

**3 (a)** What is the average amount of water used when cleaning teeth?

Answer ..... litres (1 mark)

**3 (b)** On average one person uses 160 litres of water a day.  
Chloe says,  
“I would have used less than 160 litres of water if I had only washed up once on Monday.”

Is she correct?

Tick a box.

Yes
<input type="checkbox"/>

No
<input type="checkbox"/>

You **must** show your working.

.....

.....

.....

(2 marks)



- 3 (c) This table is about the amount of water used by Chloe on Tuesday.

Use the data sheet to complete the table.

**Tuesday**

Activity	Number	Amount of water used (litres)
Having a Drink	.....	1.0
Washing hands	6	3.6
Having a Bath	1	80.0
Cleaning teeth	3	.....
Flushing toilet	5	.....
Washing up	3	18.0
		Total = 153.6

(3 marks)

- 3 (d) On average, having a shower uses one-quarter of the amount of water used by having a bath.

On average, how much water is saved by having a shower instead of a bath?

.....  
.....

Answer ..... litres (2 marks)

8

**END OF SECTION A**



**There are no questions printed on this page**

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ANSWER IN THE SPACES PROVIDED**

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