Surname		Other Names	
Centre Number		Candidate Number	
Candidate Signature			

General Certificate of Secondary Education
June 2004

MATHEMATICS (MODULAR) (SPECIFICATION B)   33001/FA
Module 1 Foundation Tier Section A

Thursday 17 June 2004 1.30 pm to 1.55 pm

F

AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

In addition to this paper you will require:
• a calculator
• mathematical instruments
• a treasury tag.

Time allowed for Section A: 25 minutes

Instructions

- Use blue or black ink or ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer **all** questions in the spaces provided.
- Do all rough work in this booklet.
- This paper is divided into **two** sections: Section A and Section B.
- After the 25 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 20.
- Mark allocations are shown in brackets.
- Additional answer paper and graph paper will be issued on request and must be tagged securely to this answer booklet.
- You are expected to use a calculator where appropriate.

Advice

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

For Examiner's Use			
Section A		**Section B**	
Number	Mark	Number	Mark
1		6	
2		7	
3		8	
4		9	
5			
Total Section A			
Total Section B			
TOTAL			
Examiner's Initials			

33001/FA

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

1 The number of aircraft landing at an airport each hour is shown below.

2   3   8   5   6   10   4   9   4   11   4

(a) Find the median of these numbers.

....

....

Answer .... *(2 marks)*

(b) Write down the mode of these numbers.

....

Answer .... *(1 mark)*

(c) Work out the range of these numbers.

....

Answer .... *(1 mark)*

(d) Calculate the mean of these numbers.

....

....

....

Answer .... *(3 marks)*

7

2   A fair six-sided dice is thrown once.
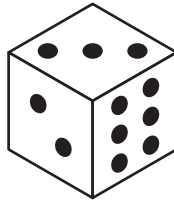
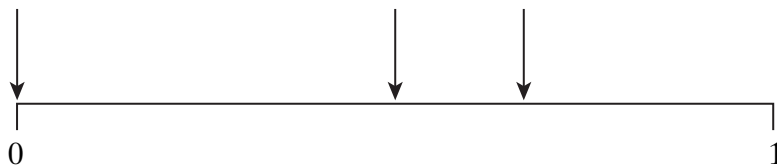
The probabilities of the following events have been marked on the probability scale below.

A: An even number is thrown.

B: A '7' is thrown.

C: A number less than 5 is thrown.

0   1

Label each arrow with the letter to show which event it represents.

(3 marks)

TURN OVER FOR THE NEXT QUESTION

Turn over ▶

3   The table shows the type of heating used in 80 houses.

Type of heating	Number of houses
Gas	36
Electricity	30
Oil	10
Coal	4

Draw and label a pie chart to represent this information.

....

....

....

....
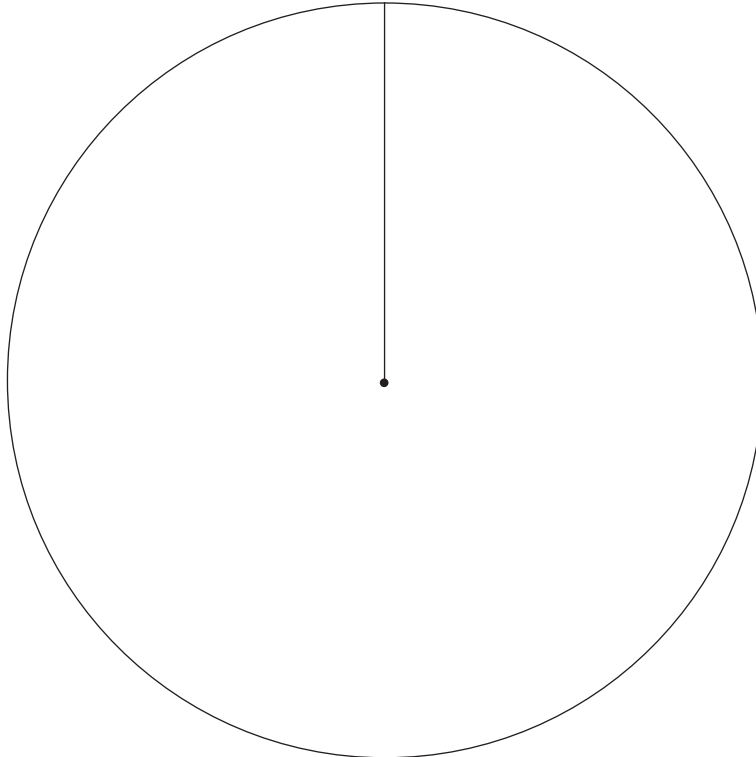
(4 marks)

4 The stem and leaf diagram shows the number of miles travelled by a salesman each day for 14 days.

Key   5 | 2 represents 52 miles

1 | 2 3
2 | 3 6
3 | 5 7 7 8
4 | 1 3 4 8
5 | 2 5

On how many days did the salesman travel between 25 and 50 miles?

....

....

Answer ....   *(2 marks)*

2

TURN OVER FOR THE NEXT QUESTION

Turn over ▶

5 A biased spinner has sections numbered 1, 2, 3, 4 and 5.
The table shows the probabilities of the spinner landing on some of the numbers.

Number	1	2	3	4	5
Probability	0.04		0.43	0.23	0.12

(a) Calculate the missing probability in the table.

....

....

....

Answer .... *(2 marks)*

(b) Calculate the probability that the spinner lands on a number greater than 2.

....

....

....

Answer .... *(2 marks)*

END OF SECTION A

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