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Centre Number					Candidate Number				
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General Certificate of Secondary Education  
June 2005



**MATHEMATICS (MODULAR) (SPECIFICATION B)  
Module 1 Foundation Tier Section A**

**33001/FA**

**F**

Friday 17 June 2005 1.30 pm to 1.55 pm

<p><b>In addition to this paper you will require:</b></p> <ul style="list-style-type: none"> <li>• a calculator</li> <li>• mathematical instruments</li> <li>• a treasury tag.</li> </ul>	
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For Examiner's Use			
Section A		Section B	
Number	Mark	Number	Mark
1		5	
2		6	
3		7	
4		8	
Total Section A			
Total Section B			
TOTAL			
Examiner's Initials			

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.

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

- 1 (a) The table shows some information about the cars for sale at a garage.

Make	Colour	Price (£)	Mileage
Rover	Silver	7 000	21 000
Ford	Black	2 999	63 000
Honda	Green	1 500	124 000
Ford	Black	950	89 000
BMW	White	11 000	25 000
Vauxhall	Red	2 750	55 000
Citroen	Black	895	94 000

- (i) Which colour of car is the mode?

Answer ..... (1 mark)

- (ii) How many cars are on sale for less than £2000?

Answer ..... (1 mark)


- (iii) Calculate the range of the mileages of the seven cars.





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Answer ..... miles (1 mark)

(b) The pictogram shows the number of cars sold by this garage for the first four months of this year.

Key  represents 2 cars

<b>January</b>	
<b>February</b>	
<b>March</b>	
<b>April</b>	
<b>May</b>	

(i) How many cars did the garage sell in January?

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Answer ..... (1 mark)

(ii) The garage sold seven cars in May.

Complete the pictogram.

(2 marks)

(iii) The garage makes £500 profit on each car sold.

How much profit did the garage make in February?

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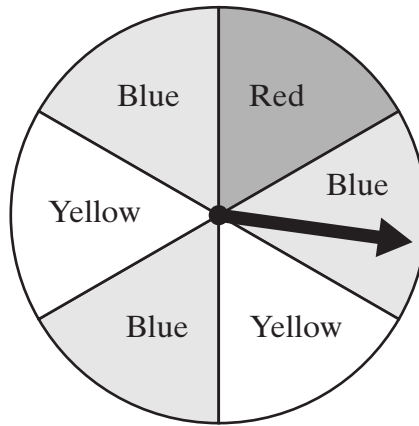
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Answer £ ..... (2 marks)

Turn over ►

- 2 A fair coloured spinner has six equal sections.  
One section is red, two sections are yellow and three sections are blue.



The arrow is spun.

- (a) Which is the least likely colour that the arrow will land on?

Answer ..... (1 mark)

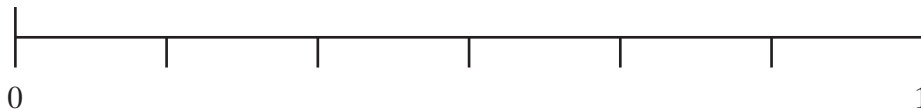
- (b) What is the probability that the arrow lands on yellow?

Answer ..... (1 mark)

- (c) Label the probability scale to show the probability of the arrow landing on

(i) Blue

(ii) Red.



(2 marks)

3 The number of water birds on a nature reserve lake is summarised in the table.

Water birds	Frequency
Herons	4
Geese	6
Swans	10
Ducks	25

Draw and label a pie chart to represent the data in the table.

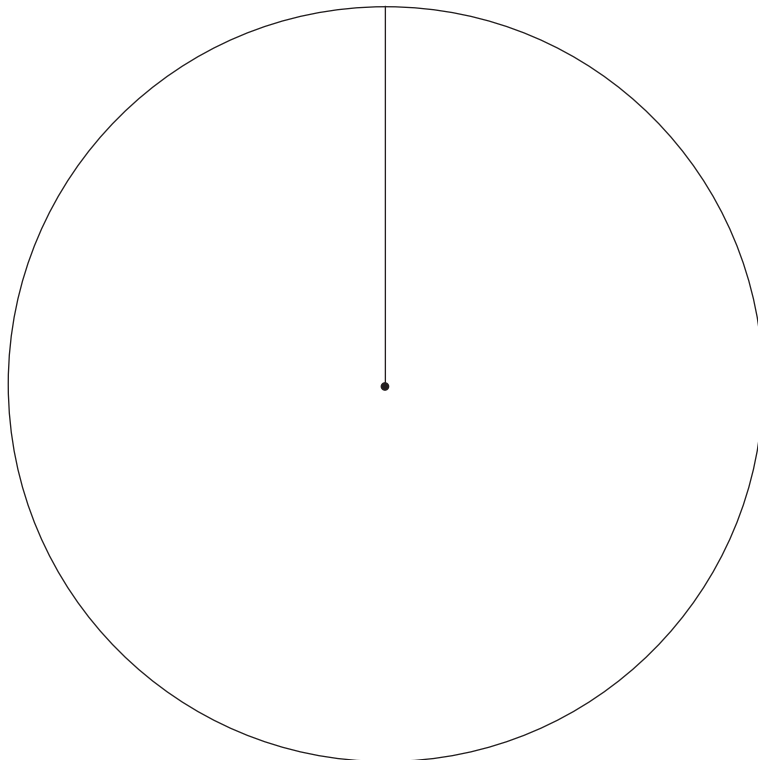
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(4 marks)

Turn over ►



- 4 A telephone company collected data about the number of telephones in each of 60 households.

The table shows the results.

Number of telephones	Number of households
0	2
1	15
2	12
3	10
4	8
5	7
6	5
7	0
8	1

- (a) Calculate the total number of telephones in these 60 households.

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Answer ..... (2 marks)

- (b) Calculate the mean number of telephones per household.

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Answer ..... (2 marks)

**END OF SECTION A**

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