General Certificate of Secondary Education
June 2004

AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

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

Thursday 17 June 2004 2.00 pm to 2.25 pm

F

In addition to this paper you will require:
mathematical instruments.
You must **not** use a calculator.

Time allowed for Section B: 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.
- You may **not** use your calculator in Section B. Your calculator must remain on the floor under your seat.
- 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.
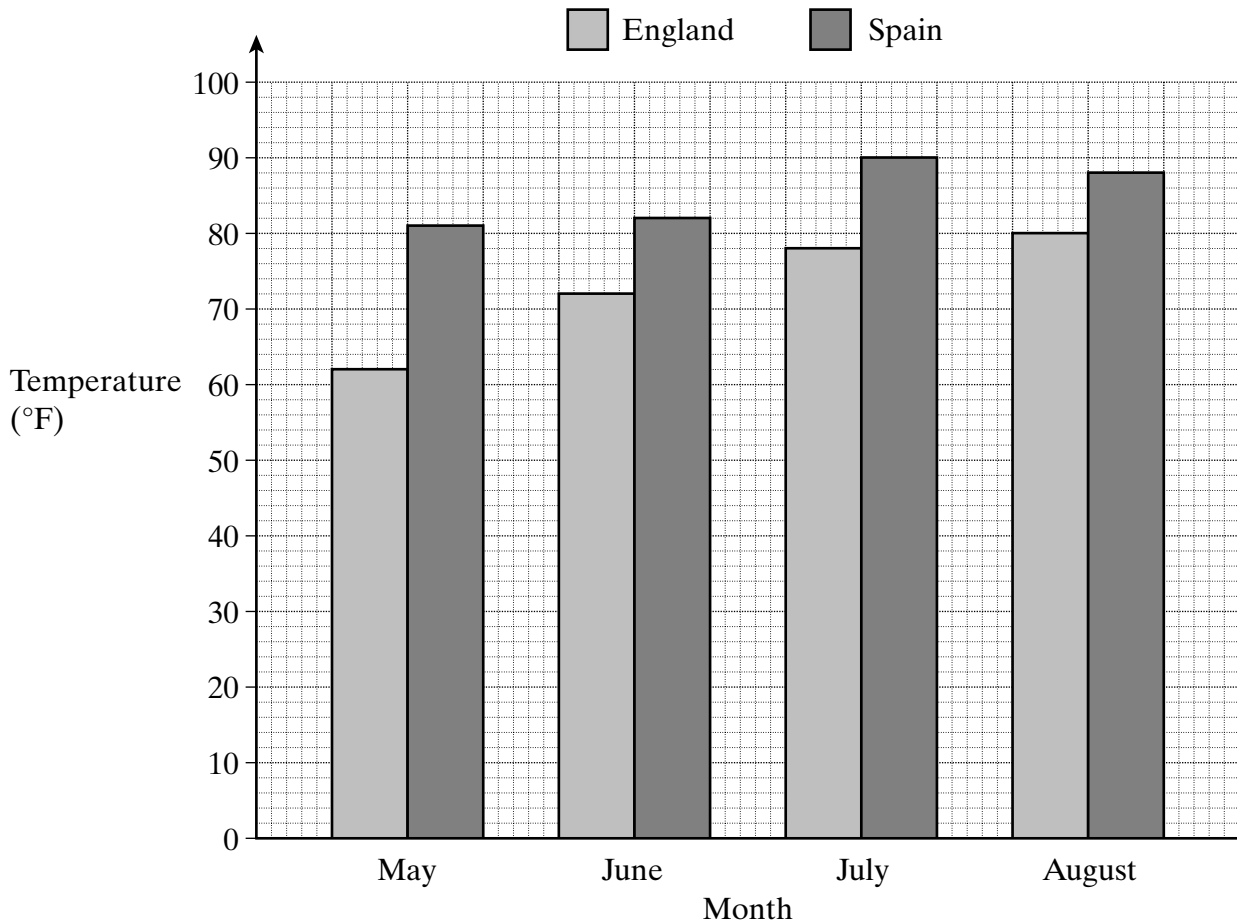
Information
- The maximum mark for Section B is 20.
- Mark allocations are shown in brackets.
- Additional answer paper and graph paper will be issued on request and must be tagged securely to this answer booklet.

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

33001/FB

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

6 The dual bar chart shows the maximum temperatures in England and in Spain over four months.

(a) What was the maximum temperature in England in June?

Answer ....°F   *(1 mark)*

(b) Which of these months had the highest temperature in Spain?

Answer ....   *(1 mark)*

(c)   What was the difference in the maximum temperature between England and Spain in August?

....

Answer ....°F   *(2 marks)*

(d)   Which of these months shows the largest difference in the maximum temperature between England and Spain?

....

Answer ....   *(1 mark)*

(e)   Sita says "The graph shows me that the maximum temperature each month for the whole year in Spain is over 80 °F."

Is she correct?
Give a reason for your answer.

....

....

....

(1 mark)

TURN OVER FOR THE NEXT QUESTION

Turn over ▶

7 The number of cars parked in an office car park is recorded in the tally chart below.

Day	Number of cars	
	Tally	Frequency
Monday	ЖЖ ЖЖ ‖	12
Tuesday	ЖЖ ‖‖	
Wednesday	ЖЖ ‖	
Thursday	ЖЖ ЖЖ ЖЖ ‖	
Friday	ЖЖ ЖЖ	

(a) Complete the frequency column.   *(1 mark)*

(b) Calculate the total number of cars parked during these five days.

....

....

Answer ....   *(1 mark)*

(c) On which day were most cars parked?

Answer ....   *(1 mark)*

(d) How many more cars were parked on Friday than on Wednesday?

....

Answer ....   *(1 mark)*

(e) Complete the pictogram to represent the information in the tally chart.

Use the symbol ◎ to represent 4 cars.

Monday	◎ ◎ ◎
Tuesday	◎ ◎
Wednesday	
Thursday	
Friday	

(2 marks)

8 A group of 40 children are asked how many dogs and cats they own.
The results are shown in the table.

Number of dogs

	0	**1**	**2**	**3**
0	5	7	3	1
1	6	3	2	0
2	7	2	1	0
3	2	1	0	0

Number of cats (row labels: 0, 1, 2, 3)

(a) How many children own two cats but no dog?

....

Answer .... *(1 mark)*

(b) How many children own two dogs?

....

....

Answer .... *(1 mark)*

(c) How many children own a total of three of these animals?

....

....

Answer .... *(2 marks)*

4

Turn over ▶

9 Michelle wants to find out if students buy lunch in the college restaurant, bring a packed lunch or go out of college for lunch.

(a) (i) Design an observation sheet for Michelle to record the data.

(2 marks)

(ii) Complete your observation sheet by inventing data for 20 students.

(1 mark)

(b) Michelle decides to stand outside the college restaurant at 12 noon to collect her data.

Give a reason why this is **not** a suitable place to carry out this survey.

....

....

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(1 mark)

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END OF QUESTIONS

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