

Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use	
Examiner's Initials	
Pages	Mark
Section A	
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TOTAL	



General Certificate of Secondary Education
Foundation Tier
June 2010

Mathematics (Modular) (Specification B)

43051/FA

Module 1 Section A

F

Monday 21 June 2010 1.30 pm to 2.00 pm

<p>For this paper you must have:</p> <ul style="list-style-type: none"> • a calculator • mathematical instruments • a treasury tag. 	
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Time allowed for Section A

- 30 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. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book.
- This paper is divided into two sections: Section A and Section B.
- After the 30 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 marks for questions are shown in brackets.
- The maximum mark for Section A is 23.
- You may ask for more answer paper and graph paper. This must be tagged securely to this answer booklet.

Advice

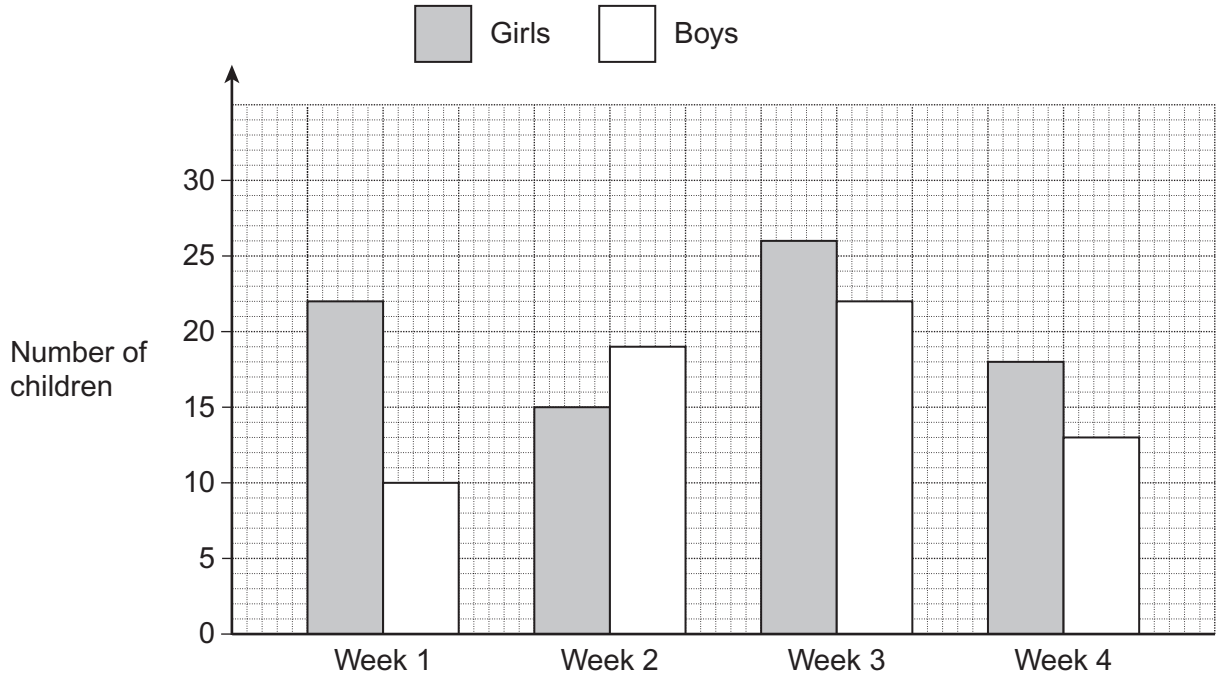
- In all calculations, show clearly how you work out your answer.



J U N 1 0 4 3 0 5 1 F A 0 1

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

1 The bar chart shows the numbers of girls and boys at a school music club over four weeks.



1 (a) How many boys were at the club in week 1?

Answer (1 mark)

1 (b) How many children were at the club in week 4?

.....

Answer (2 marks)

1 (c) Which week was the mode for the girls?

Answer (1 mark)

1 (d) Why was Week 2 different from the other weeks?

.....

..... (1 mark)



2 Draw a line between the boxes to match each event to the correct probability word.

Throwing the number 8
on an ordinary dice

Snow falling in London
on 1st May

A fair coin landing
on 'heads'

Certain

Likely

Evens

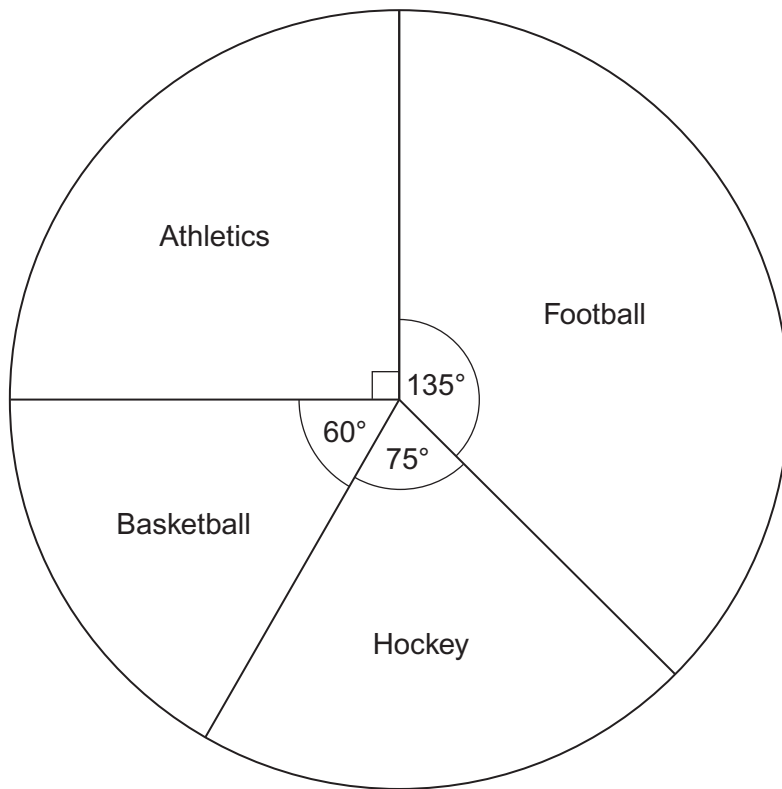
Unlikely

Impossible

(3 marks)



3 (a) The pie chart shows the favourite sport chosen by 120 boys.



3 (a) (i) Which sport is the most popular?

Answer (1 mark)

3 (a) (ii) What fraction chose basketball as their favourite sport?

.....

Answer (1 mark)

3 (a) (iii) Which sport was chosen by exactly one-quarter of the boys?

Answer (1 mark)



3 (b) The table shows the favourite sport chosen by 120 girls.

Sport	Number of girls
Hockey	48
Basketball	15
Athletics	30
Rounders	27

How many more girls than boys chose hockey as their favourite sport?

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Answer (4 marks)

Turn over for the next question

7

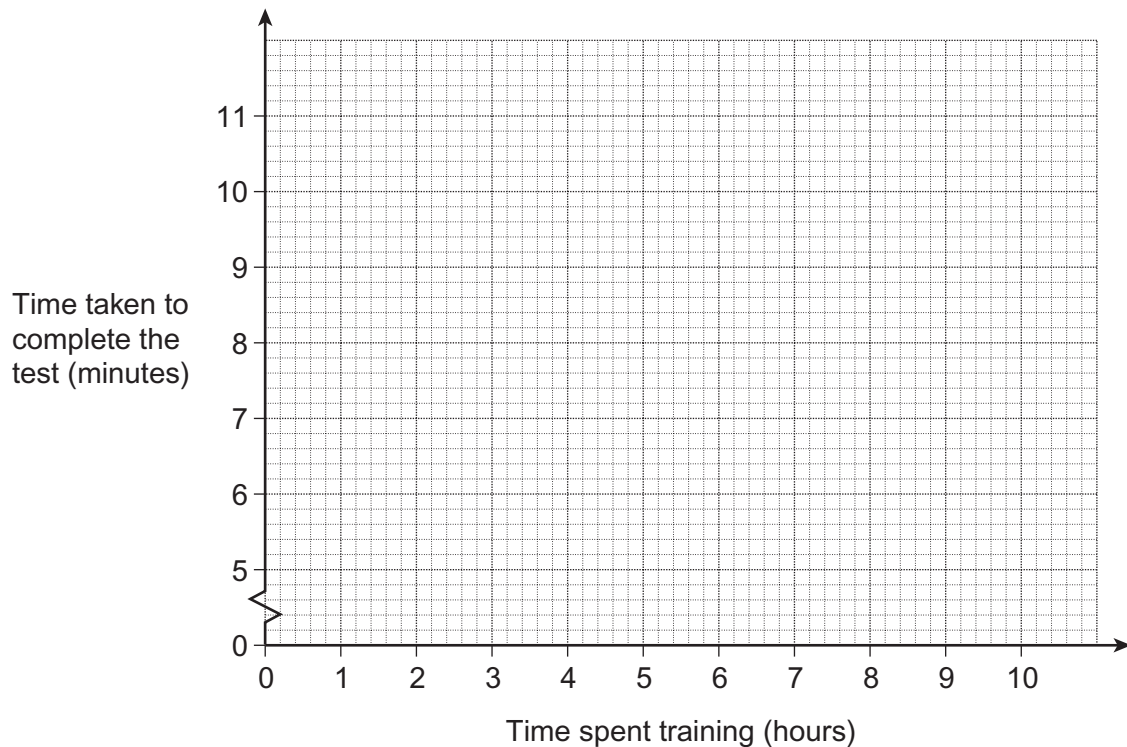
Turn over ►



- 4 Seven students trained to complete a fitness test. The table shows the time each student spent training and the time taken by each student to complete the test.

Time spent training (hours)	5	6	3	10	2	9	7
Time taken to complete the test (minutes)	8.5	8.1	10.2	6.3	10.5	6.1	7

- 4 (a) Plot these results as a scatter diagram on the grid below.



(2 marks)

- 4 (b) The graph shows negative correlation.

What does this tell you about the relationship between the time spent training and the time taken to complete the test?

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(1 mark)



5 Jake goes fishing on Saturdays in the fishing season.
He records the weight of every fish he catches.

Weight, w (kg)	Frequency		
$0 < w \leq 1$	10		
$1 < w \leq 2$	17		
$2 < w \leq 3$	3		
$3 < w \leq 4$	7		
$4 < w \leq 5$	3		

5 (a) Write down the modal class.

Answer $< w \leq$ (1 mark)

5 (b) Calculate an estimate of the mean weight of the fish.

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Answer kg (4 marks)

END OF SECTION A



There are no questions printed on this page

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

