Surname		Other Names	
Centre Number		Candidate Number	
Candidate Signature			

General Certificate of Secondary Education
November 2003

MATHEMATICS (MODULAR) (SPECIFICATION B)   **33003/FA**
Module 3 Foundation Tier Section A

AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Wednesday 19 November 2003 9.00 am to 9.40 am

F

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

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

Time allowed for Section A: 40 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 40 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, make sure that you hand in **both** Section A and Section B securely tagged together with Section A on top.

Information
- The maximum mark for Section A is 32.
- Mark allocations are shown in brackets.
- Additional answer 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.

33003/FA

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

1

Raffle tickets

50 pence each
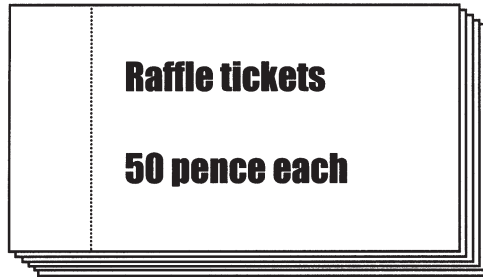
Kathy sells 3 books of raffle tickets.
There are 10 tickets in each book.

(a)   How many tickets does she sell?

....

....

Answer ....   *(1 mark)*

(b)   How much money does she receive from selling these tickets?

....

....

Answer £ ....   *(2 marks)*

2 The table below shows the medals won by some countries in the 2000 Olympics.

Number of medals

		gold	silver	bronze
Country	**USA**	40	24	33
	Russia	32	28	28
	Australia		17	58
	Great Britain	11	7	28

(a) Australia won half the number of gold medals that Russia won.

How many gold medals did Australia win?

....

Answer .... *(1 mark)*

(b) How many medals did Great Britain win altogether?

....

Answer .... *(1 mark)*

(c) A gold medal scores 3 points, a silver medal scores 2 points and a bronze medal scores 1 point.

How many points did the USA score altogether?

....

....

....

....

Answer .... *(3 marks)*

Turn over ▶

3 (a) A restaurant charges 70p for a glass of water.

(i) What is the cost of 5 glasses of water?

....

....

Answer £ .... *(2 marks)*

(ii) A bottle of water fills 5 glasses.
The bottle of water costs £3.

How much cheaper is it to buy a bottle of water than 5 separate glasses?

....

....

Answer .... pence *(1 mark)*

(b) Six people spend £76.50 in total on a meal.
They share the cost equally.

How much does each person pay?

....

....

Answer £ .... *(2 marks)*

4 (a) Salma is 1.42 metres tall.
Jane is 3 centimetres taller than Salma.

Work out Jane's height in metres.

....

Answer .... metres   *(1 mark)*

(b) Paul's height is 160 centimetres.
During one year, his height increases by 5%.

Work out the increase in Paul's height.

....

....

Answer .... centimetres   *(2 marks)*

TURN OVER FOR THE NEXT QUESTION

Turn over ▶

5 The diagram shows a number line.
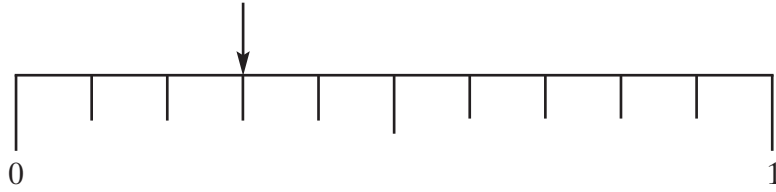
(a) Write down the number shown by the arrow.

....

Answer .... *(1 mark)*

(b) Draw an arrow on the diagram to show the position of the number 0.75

(1 mark)

6 (a) Work out $12 - (3 + 7)$

....

Answer .... *(1 mark)*

(b) Put brackets in each of these calculations to make them correct.

(i) $18 - 4 - 2 = 16$

(ii) $3 + 4 \times 5 = 35$

(2 marks)

7 The total cost of four books is £21.56
Postage is £1.13 for each book.

Show that the total cost of the books and the postage is £26.08

....

....

....

....

(2 marks)

8 Bill changes £27 into Swiss francs.
The exchange rate is £1 to 1.55 Swiss francs.

How many Swiss francs does he receive?

....

....

Answer .... Swiss francs   *(2 marks)*

9 The price of a computer is £840.
In a sale the price is reduced by 15%.

What is the sale price?

....

....

Answer £ ....   *(3 marks)*

Turn over ▶

10 The total number of marks for a test is 40.

(a) The marks are divided between Section A and Section B in the ratio 4 : 1

How many marks are there for Section A?

....

....

Answer .... *(2 marks)*

(b) Shahid gains 24 marks out of 40 in the test.

Work out his mark as a percentage.

....

....

Answer .... % *(2 marks)*

END OF SECTION A

General Certificate of Secondary Education
November 2003

MATHEMATICS (MODULAR) (SPECIFICATION B)   **33003/FB**
Module 3 Foundation Tier Section B

F

Wednesday 19 November 2003 9.45 am to 10.25 am

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

Time allowed for Section B: 40 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, make sure that you hand in **both** Section A and Section B securely tagged together with Section A on top.

Information
- The maximum mark for Section B is 32.
- Mark allocations are shown in brackets.
- Additional answer 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.

33003/FB

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

11 (a) Write the number 2163 in words.

Answer ....

....
(1 mark)

(b) Write 5367 to the nearest hundred.

....

Answer .... *(1 mark)*

(c) Here are four number cards.

| 5 | 8 | 3 | 6 |

Rearrange the cards to make the biggest possible number.

....

....

Answer ☐ ☐ ☐ ☐ *(1 mark)*

(d)   Arrange these numbers in order of size, starting with the smallest.

one million
four hundred and fifty thousand
half a million
twenty five thousand

....

....

Answer   ....

....

....

....

(2 marks)

(e)   What is the value of the digit 8 in the number 57 830?

....

Answer   ....   *(1 mark)*

12   Circle each number that is less than one half.

0.21   52% $\frac{1}{3}$ 0.78 $\frac{3}{4}$ 35%

....

....

(3 marks)

Turn over ▶

13 The table shows the number of pupils in a school.

Boys	933
Girls	857

(a) How many pupils are there altogether?

....

....

Answer .... *(1 mark)*

(b) How many more boys are there than girls?

....

....

Answer .... *(2 marks)*

14 Work out 70% of 90.

....

....

....

Answer .... *(2 marks)*

15 Pencils cost 35 pence each.
Sue buys as many pencils as she can for £4.

(a) How many pencils does she buy?

....

....

....

....

Answer .... *(2 marks)*

(b) Sue pays with four £1 coins.

How much change does she receive?

....

....

....

Answer .... pence   *(2 marks)*

9

Turn over ▶

16 Work out

(a) 0.3×0.1

....

....

Answer .... *(1 mark)*

(b) $\frac{1}{6} \times \frac{3}{5}$

....

....

Answer .... *(1 mark)*

(c) $2^3 + 7^2$

....

....

Answer .... *(2 marks)*

17 (a) The odd number 9 can be written as the sum of two consecutive numbers: $9 = 4 + 5$

Write the number 45 as the sum of two consecutive numbers.

....

....

Answer   45 = ...   *(2 marks)*

(b) Gavin says that when you add two odd numbers the answer is always an odd number.

Give an example to show that Gavin is wrong.

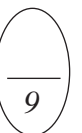...

....

Answer ....   *(1 mark)*

18 A pile of 20 sheets of card is 1 cm high.

How high is a pile of 50 sheets of card?

....

....

....

Answer .... cm   *(2 marks)*

Turn over ▶

19 Brian travels 150 miles in 3 hours.
Clive travels 110 miles in 2 hours.

Who is travelling faster?
You **must** show all your working.

....

....

....

....

....

(3 marks)

20 Estimate the value of $\quad$ 198×40.3

....

....

....

Answer .... *(2 marks)*

END OF QUESTIONS