Surname		Other Names	
Centre Number			Candidate Number									
Candidate Signature												

For Examiner's Use

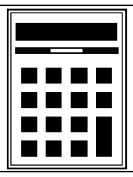
General Certificate of Secondary Education
November 2008

MATHEMATICS (MODULAR) (SPECIFICATION B) 43053/FA
Module 3 Foundation Tier Section A
Non-coursework Specification

F

Thursday 13 November 2008 9.00 am to 9.45 am

For this paper you must have:
- a calculator
- mathematical instruments
- a treasury tag.



Time allowed for Section A: 45 minutes

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

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. Answers written in margins or on blank pages will not be marked.
- Use a calculator where appropriate.
- Do all rough work in this book.
- This paper is divided into two sections: Section A and Section B.
- After the 45 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 35.
- The marks for questions are shown in brackets.
- You may ask for more answer paper. This must be tagged securely to this answer book.

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

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

1 (a) Write 40 000 in words.

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

1 (b) Write one thousand and one in figures.

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

1 (c) Write these numbers in order of size.
Start with the largest.

5302 5290 5310

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

1 (d) Work out the sum of 5302, 5290 and 5310.

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

2 A bakery sells cakes in boxes of six.
One box costs £2.76

2 (a) Vic buys eight boxes for a party.

2 (a) (i) Work out the cost of eight boxes.

.....

Answer £ ..... *(2 marks)*

2 (a) (ii) Nine of the cakes were **not** eaten at the party.

How many cakes were eaten at the party?

.....

.....

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

2 (b) Nina buys one box of cakes for £2.76
She pays with exactly five coins.

List the five coins.

.....

.....

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

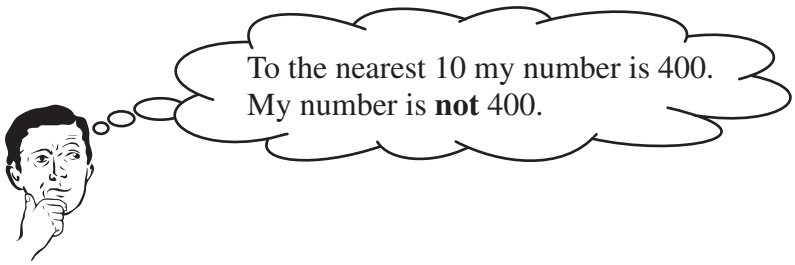
3 (a) Round 272 to the nearest 10.

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

3 (b) Round 272 to the nearest 100.

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

3 (c) Manish is thinking of a number.



Manish is correct.

What could his number be?

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

12

4 There are 175 pupils in Year 10 at a school.

4 (a) $\frac{2}{5}$ of these pupils own a dog.

How many pupils in Year 10 own a dog?

.....

.....

.....

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

4 (b) Alice says that exactly half of the Year 10 pupils are boys.

Explain why Alice must be wrong.

.....

.....

(1 mark)

4 (c) The number of pupils in Year 10 is one-eighth of the total number of pupils in the school.

Work out the total number of pupils in the school.

.....

.....

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

5 Work out 35% of 620.

.....

.....

.....

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

6 Pat stands on some weighing scales.
He is holding three identical parcels.
Pat and the three parcels weigh 64.3 kilograms.
Pat weighs 57.4 kilograms.

Work out the weight of one parcel.

.....

.....

.....

Answer ..... kg *(3 marks)*

7 (a) (i) Calculate 168^2

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

7 (a) (ii) Write your answer to part (i) to one significant figure.

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

7 (b) Calculate the cube root of 216.

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

Turn over for the next question

13

8 Two shades of pink paint are made by mixing red and white paint as shown.

Shade	red : white
Blushing Pink	3 : 1
Dusky Pink	3 : 2

8 (a) What percentage of Blushing Pink is red paint?

.....

.....

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

8 (b) How much red paint is needed to make 20 000 litres of Dusky Pink?

.....

.....

Answer ..... litres *(2 marks)*

9 (a) The price of a mobile phone is £68.
In a sale the price is decreased by 15%.

Work out the price of the mobile phone in the sale.

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.....

.....

Answer £ ..... *(3 marks)*

9 (b) The number of phones sold increased from 80 to 108.

Work out the percentage increase.

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.....

Answer ..... % *(3 marks)*

END OF SECTION A

10

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General Certificate of Secondary Education
November 2008

ASSESSMENT and QUALIFICATIONS ALLIANCE

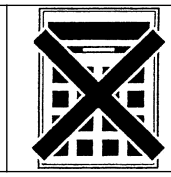
MATHEMATICS (MODULAR) (SPECIFICATION B) 43053/FB
Module 3 Foundation Tier Section B
Non-coursework Specification

F

Thursday 13 November 2008 9.50 am to 10.35 am

For this paper you must have:
- mathematical instruments.

You must **not** use a calculator.



Time allowed for Section B: 45 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. Answers written in margins or on blank pages will not be marked.
- Do all rough work in this book.
- 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 35.
- The marks for questions are shown in brackets.
- You may ask for more answer paper. This must be tagged securely to this answer book.

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

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

10 Complete this bill from a café.

4 orange juices at £2 each	£
3 sandwiches at £2.50 each	£
4 chocolate bars at 45p each	£
Total	£

.....

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.....

.....

(4 marks)

11 Here is a list of numbers.

12 8 16 3 19 36

11 (a) Write down **three** numbers from the list that add up to 30.

.....

.....

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

11 (b) Write down **one** number from the list that is a square number.

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

11 (c) Write down the number from the list that is a factor of 40.

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

11 (d) Write down the number from the list that is 50% of 24.

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

12 Complete the following.

12 (a) $2958 \times \square = 0$

(1 mark)

12 (b) $362 \div \square = 1$

(1 mark)

12 (c) $\frac{1}{2}$ of $\square = 60$

(1 mark)

12 (d) $48 \times 31 = 24 \times \square$

(1 mark)

12 (e) $520 \div 10 = 0.52 \times \square$

(1 mark)

12 (f) $10^3 = \square$

(1 mark)

12 (g) $20 \div \square = -5$

(1 mark)

13 Four tickets for a concert cost a total of £152.

Work out the cost of one ticket.

.....

.....

Answer £ ..... *(2 marks)*

14 Sanjay's watch is five minutes fast.
Kyle's watch is eight minutes slow.

What time is shown on Kyle's watch when Sanjay's watch shows 14:07?

.....

.....

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

19

15 (a) Work out 0.4×0.1

.....

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

15 (b) Work out $7.8 - 2.47$

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

15 (c) Work out 247×36

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Answer ..... *(3 marks)*

16 Estimate the value of $\frac{39.87}{0.49}$

.....

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

17 A cinema runs a Holiday Club.
Holiday Club membership costs £10.

Cost per visit to the cinema
Normal price £6
Holiday Club price £3

Cara joins the Holiday Club.

What is the least number of visits that she needs to make so that her total cost is less than the normal price total cost?
You **must** show your working.

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Answer ..... *(3 marks)*

18 Given that $6.42 \times 54 = 346.68$

work out the value of 6.42×53

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

12

19 Work out $3\frac{2}{3} + 1\frac{2}{3}$

Give your answer as a mixed number in its simplest form.

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

20 Write 36 as the product of its prime factors.

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

END OF QUESTIONS

4

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