Surname		Other Names	
Centre Number			Candidate Number									
Candidate Signature												

For Examiner's Use

General Certificate of Secondary Education
November 2007

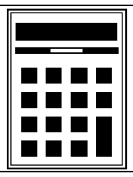
ASSESSMENT and QUALIFICATIONS ALLIANCE

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

F

Monday 12 November 2007 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		6–7	
Total Section A			
Total Section B			
TOTAL			
Examiner's Initials			

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.
- Answer the questions in the spaces provided.
- 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 the number two thousand and seven in figures.

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

(b) What is the value of the digit 3 in 22 439?

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

2 (a) A candle costs £1.35
Ronnie buys four candles.

(i) Work out the cost of four candles.

.....

.....

Answer £ ..... *(2 marks)*

(ii) He pays with a £10 note.

How much change does he get?

.....

Answer £ ..... *(1 mark)*

(b) Ronnie now has six coins in his pocket.
The total value of these coins is £6.80

List the six coins.

.....

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

(c) A box of matches costs 45p.

What is 45p as a fraction of £1.35?
Give your answer in its simplest form.

.....

.....

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

3 (a) Write $\frac{4}{5}$ as a decimal.

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

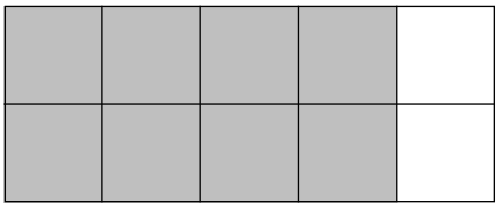
(b) Work out $\frac{4}{5}$ of 85.

.....

.....

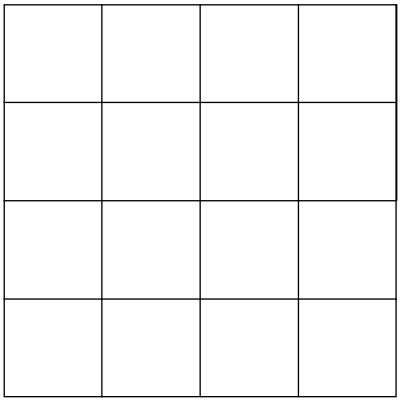
Answer ..... *(2 marks)*

(c) What percentage of this grid is shaded?



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

(d) Joanna wants to shade whole squares in the grid below so that exactly $\frac{4}{5}$ of the grid is shaded.



Explain why this is **not** possible.

.....

.....

.....

(1 mark)

14

4 (a) Calculate $2 + \frac{3}{4}$

Write your answer as a decimal.

.....

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

(b) Write your answer to part (a) to one decimal place.

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

5 Work out

(a) the cube of 4

.....

.....

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

(b) $\frac{4}{0.2^3}$

.....

.....

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

6 (a) Write down a two-digit square number larger than 50.

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

(b) Write down a two-digit prime number smaller than 20.

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

(c) Bob says the next number after a square number is always prime.
He is wrong.

Write down **two** square numbers where the next number is **not** prime.

.....

.....

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

7 Decrease 800 by 39%.

.....

.....

.....

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

8 A watch in England costs £60.
The same watch in France costs €100.
The exchange rate is £1 = €1.65

In which country is the watch cheaper and by how much?
You **must** show your working.
State the units of your answer.

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.....

Answer ..... *(4 marks)*

Turn over for the next question

16

9 (a) An empty flower pot weighs 600 g.
The weight of the flower pot increases to 1.9 kg when filled with soil.

Calculate the percentage increase in the weight of the flower pot.
Give your answer to one significant figure.

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.....

Answer ..... % *(4 marks)*

(b) A watering can weighs 850 g to the nearest 10 g.

What is the least possible weight of the watering can?

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

END OF SECTION A

5

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There are no questions printed on this page

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General Certificate of Secondary Education
November 2007

ASSESSMENT and QUALIFICATIONS ALLIANCE

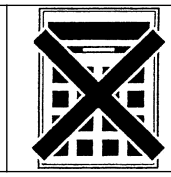
MATHEMATICS (MODULAR) (SPECIFICATION B) 43053/FB
Module 3 Foundation Tier Section B
Non-coursework Specification

F

Monday 12 November 2007 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 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.
- Answer the questions in the spaces provided.
- 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 Work out

(a) 10% of 80

.....

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

(b) 14×3

.....

.....

.....

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

(c) $92 \div 4$

.....

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

(d) $520 - 187$

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

11 (a) The digits 2, 3 and 4 can be used to make different answers.
For example $2 + 3 - 4 = 1$ $2 \times 4 + 3 = 11$
Each digit can only be used once.

Use the digits 2, 3 and 4 once only to make an answer of

(i) 9

.....

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

(ii) 24

.....

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

(iii) 10

.....

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

(b) Work out

(i) $2 \times 4 - 3$

.....

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

(ii) $2 + 3 \times 4$

.....

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

10

12 (a) Write 0.6 as a fraction.

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

(b) Write 90 % as a decimal.

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

(c) Write 0.01 as a percentage.

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

13 Adult tickets for a concert cost £15 each.

(a) What is the cost of 40 adult tickets?

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.....

Answer £ ..... *(2 marks)*

(b) Child tickets are half price.

Find the total cost of four adult and three child tickets.

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.....

Answer £ ..... *(3 marks)*

14 Write down a number larger than 2.5 and smaller than 2.6

.....

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

15 (a) Write down the answer to

(i) $3 - 9$

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

(ii) -2×6

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

(iii) $-14 \div -7$

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

(b) Work out $\frac{3}{20}$ as a percentage.

.....

.....

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

Turn over for the next question

14

16 The table shows information about the number of people watching a firework display.

	Men	**Women**	**Children**
Fraction of people	$\frac{3}{10}$	$\frac{1}{10}$	
Number of people		50	

(a) Complete the table.

.....

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.....

.....

.....

(5 marks)

(b) Write down the ratio of men to women.

.....

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

17 Roger needs $1\frac{2}{3}$ balls of wool to knit one jumper.

(a) He wants to knit two jumpers.

How many balls of wool does he need to buy?

.....

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.....

.....

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

(b) A different type of jumper needs $1\frac{1}{4}$ balls of wool.

Bethany says that she can knit one of each type of jumper using less than three balls of wool.

Is Bethany correct?
You **must** show your working.

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(3 marks)

END OF QUESTIONS

11

There are no questions printed on this page