Surname					Other	Names			
Centre Number						Candida	ate Number		
Candidate Signat	ure								

For Examiner's Use

General Certificate of Secondary Education November 2008

MATHEMATICS (MODULAR) (SPECIFICATION B) Module 3 Foundation Tier Section A

43003/FA



Thursday 13 November 2008 9.00 am to 9.40 am

For this paper you must have:

- · a calculator
- · mathematical instruments
- · a treasury tag.



Time allowed for Section A: 40 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.
- 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 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 tag Section A and Section B together with Section A on top.

Information

- The maximum mark for Section A is 32.
- 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.



For Examiner's Use						
Secti	on A	Section B				
Pages	Mark	Pages	;	Mark		
2–3		2-3				
4-5		4-5				
6		6				
Total Sec	ction A		_			
Total Sec	Total Section B					
TOTAL						
Examine	r's Initials					

			Answer an questions in the spaces provided.
1	(a)	Writ	e 40 000 in words.
			Answer (1 mark)
1	(b)	Writ	e one thousand and one in figures.
			Answer (1 mark)
1	(c)		e these numbers in order of size. t with the largest.
			5302 5290 5310
			Answer (1 mark)
2			sells cakes in boxes of six. osts £2.76
2	(a)	Vic l	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	(b)	Nina buys one box of cakes for £2.76 She pays with exactly five coins.
		List the five coins.
		Answer
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.
		To the nearest 10 my number is 400. My number is not 400.
		Manish is correct.
		What could his number be?
		Answer(1 mark)

11

Turn over ▶



4	Ther	e 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
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	Worl	x out 35% of 620.
	,,,,,,,	
	•••••	
	•••••	
	•••••	
		Answer



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							
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)							

13

Turn over ▶



8	Two	shades	of pin	k naint	are	made	hv	mixing	red	and	white	paint	as	shown	١.
U	1 *** **	Bilaacs	or biii	K Puiii	uic	maac	$\boldsymbol{\sigma}_{\boldsymbol{y}}$	manne	rcu	unu	WIIICO	pann	us	DITO WI	т.

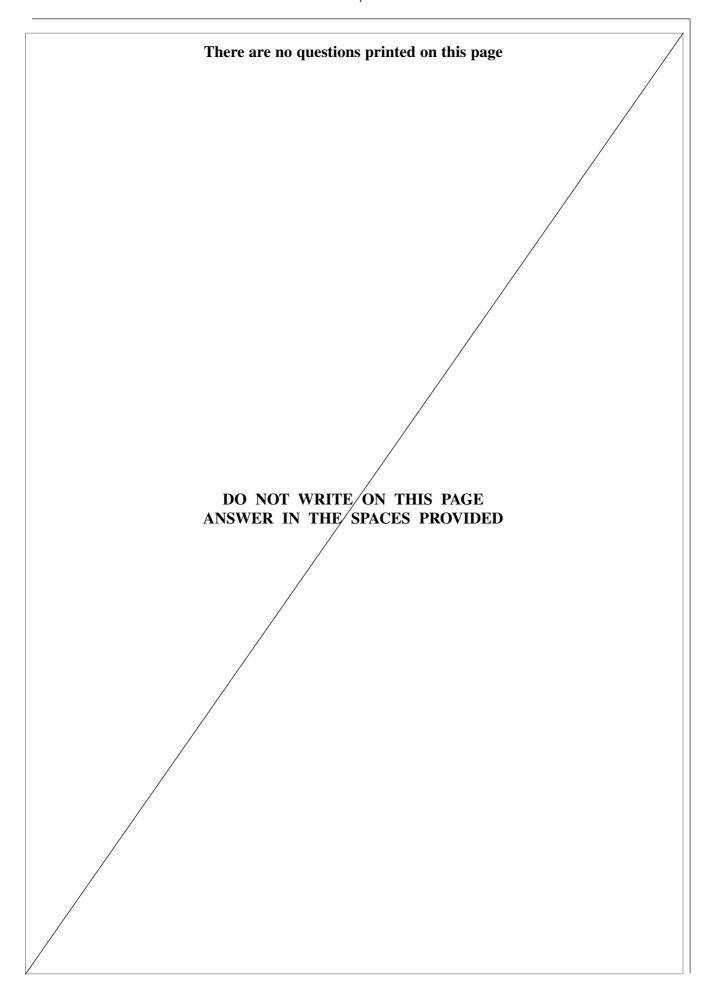
Shade	red : white
Blushing Pink	3:1
Dusky Pink	3:2

			Diusillig Filik	5.1	
			Dusky Pink	3:2	
0	(a)	What naments as of D	luchina Dink is no	1	
8	(a)	What percentage of B	lusning Pink is rec	i paint?	
			•••••		
		Δncwer			% (2 marks)
		Aliswei		••••••	
8	(b)	How much red paint i	s needed to make ?	20 000 litres of	f Dusky Pink?
		A			1'. (2 1)
		Answer	•••••	•••••	litres (2 marks)
9	(a)	The price of a LCD T		this price	
		In a sale the price is re	educed to 83 % of	uns price.	
		Work out the new price	ce.		
				•••••••	
				•••••	
		Answer £			(2 marks)
9	(b)	The price of a games	console is f240		
	(0)	In a sale the price is d			
		Work out the decrease	e as a percentage o	f the price bef	ore the sale.
		World out the decrease	as a percentage o	r une price der	ore the saie.
		Answer			% (2 marks)

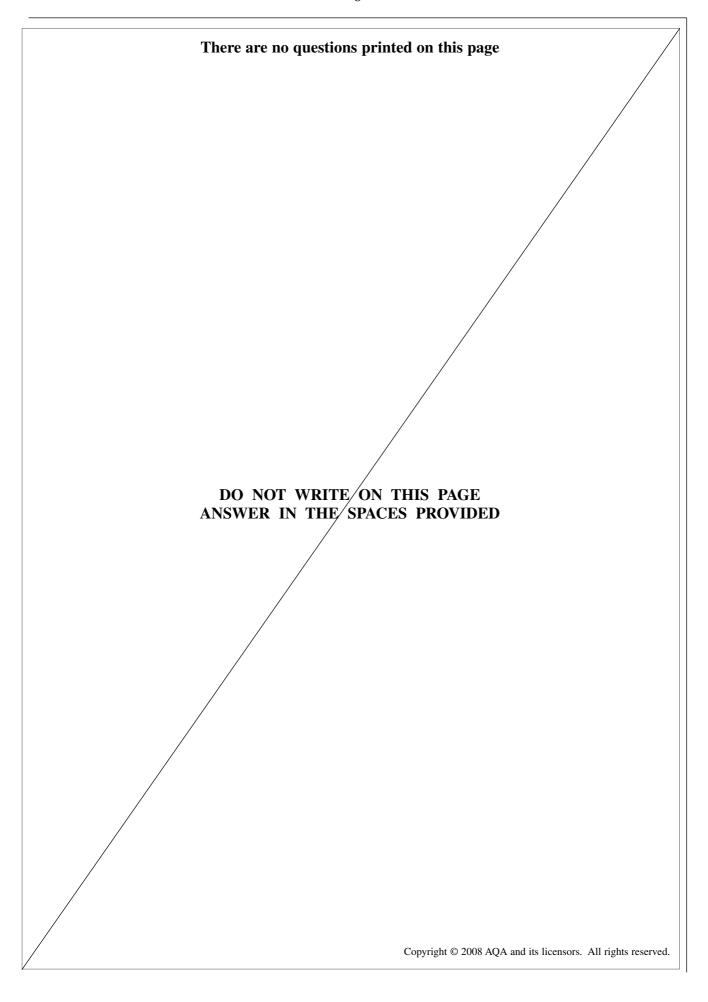
END OF SECTION A

8











Surname	name				Other	Names			
Centre Number						Candida	ate Number		
Candidate Signature									

General Certificate of Secondary Education November 2008

MATHEMATICS (MODULAR) (SPECIFICATION B) Module 3 Foundation Tier Section B

43003/FB



Thursday 13 November 2008 9.45 am to 10.25 am

For this paper you must have:

· mathematical instruments.



You must not use a calculator.

Time allowed for Section B: 40 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 32.
- 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	e spaces provided.	
10	Com	plete this bill from a café.		
		4 orange juices at £2 each	£	
		3 sandwiches at £2.50 each	£	
		4 chocolate bars at 45p each	£	
		Total	£	
	•••••			
	•••••			(4 marks)
11	Here	is a list of numbers.		
		12 8 16 3	19 36	
		12 6 10 3	19 30	
11	(a)	Write down three numbers from the list th	at add up to 30.	
			-	
				••••••
		Answer		(1 mark)
11	(b)	Write down one number from the list that	s a square number.	
		Answer		(1 mark)
11	(c)	Write down the number from the list that is	s a factor of 40.	
	(-)			(1
		Answer		(1 mark)



- **12** Complete the following.
- **12** (a) 2958 × = 0

(1 mark)

12 (b) 362 ÷ = 1

(1 mark)

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

(1 mark)

12 (d) $10^3 =$

(1 mark)

12 (e) $20 \div$ = -5

(1 mark)

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

Work out the cost of one ticket.

.....

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

Ryle's watch is eight influtes slow.

.....

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

16

Turn over ▶



15	(a)	Work out	0.4 ×	0.1
			Answer	(1 mark)
15	(b)	Work out	7.8 –	2.47
		••••••	•••••••	
		••••••		
15	(c)	Work out	247 >	< 36
			•••••	
			Answer	
1.0	.	1 .1	c	39.87
16	Estir	nate the val	ue of	0.49
			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.					
Answer					
Given that	$6.42 \times 54 = 346.68$				
work out the value of	6.42×53				
Answer					

12

Turn over ▶



18

19	Work out	$3\frac{2}{3} + 1\frac{2}{3}$
	Give your ans	wer as a mixed number in its simplest form.
		Answer
20	Write 36 as th	ne product of its prime factors.
		Answer

END OF QUESTIONS

4

