Surname				Other	Names			
Centre Number					Candida	ate Number		
Candidate Signature								

For Examiner's Use

General Certificate of Secondary Education November 2009

# AQA

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

43053/FA

Friday 13 November 2009 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

#### **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.



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Secti	Section B			
Pages	Mark	Pages	6	Mark
2-3		2-3	3	
4-5 4-		4-5	5	
6-7	6-7			
Total Section A				
Total Section B				
TOTAL				
Examiner's Initials				

# Answer all questions in the spaces provided.

			•	•	-		
1	(a)	Write the number r	ine thousand a	nd four in figu	res.		
		Answer		•••••	•••••	(1	mark)
1	(b)	Write the number (	.35 in words.				
		Answer				(1	mark)
1	(c)	Convert 270 pence	to pounds.				
	( )	-	-			(1	mark)
		T HIS WE	~	•••••	•••••		man ky
2	Here	is a list of numbers					
		25	40	15	12	5	
	Fron	n the list, write down	l				
2	(a)	a multiple of 6					
		Answer	·			(1	mark)
2	(b)	a factor of 20				·	,
_	(0)					(1	(mark)
2	( )		•••••	••••••	••••••	(1	mark)
2	(c)	a square number					
		Answer	•	•••••	•••••	(1	mark)
2	(d)	a number that roun	ded to the near	est 10 gives ar	answer of 20		
		Answer				(1	mark)
2	(e)	a number that is 10	times bigger t	han $2\frac{1}{2}$ .			
		Answer				(1	mark)



3 The cost of some items in a café is shown.

Item	Cost
Sausage	30p
Slice of bacon	25p
Fried egg	
Portion of beans	40p

3	(a)	Frank buys a sausage, a slice of bacon and a portion of beans.
		Work out the total cost.
		Answerp (2 marks)
3	(b)	Selina buys two sausages and a fried egg. She pays with a two-pound coin. She receives 90p change.
		What is the cost of a fried egg?
		Answerp (3 marks)

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Turn over ▶



4	(a)	Four out of every five members of a running club are men. The club has 240 members.	
		How many are men?	
		Answer	
4	(b)	Membership fees are £3 each month.	
		Show that the total paid in one year by all 240 members is £8640.	
		(2 )	marks)
4	(c)	The following year the club needs £10 000 from membership fees. The number of members is expected to increase by $10\%$ .	
		Work out the new monthly fee required, assuming membership increases as exper-	cted.
		Answer £(5 i	narks)



5	(a)	Explain why the cube of 5 is equal to 125.
		(1 mark)
5	(b)	Calculate $6^3$
		Answer (1 mark)
5	(c)	Is 196 a cube number?
		Explain your answer.
		(1 mark)
5	(d)	Find <b>one</b> number which is both a square number and a cube number.
		Answer (1 mark)

Turn over for the next question

Turn over ▶



6 Shampoo is on sale in three sizes of bottle.

Small	Medium	Large
[100 ml]	300 ml	$\frac{1}{2}$ litre
79p	£1.99	£3.49

Which size of bottle is best value? You <b>must</b> show your working.
Answer
Hernie has £35 in her purse, to the nearest £5.
(a) What is the least amount Hernie could have in her purse?
Answer £(1 mark)

Answer £ ......(1 mark)

What is the greatest amount Hernie could have in her purse?



7

7

(b)

8	In a sale, a settee is advertised with 60% off the original price of £800.	
	For one day only, the settee is offered with an extra 20% off the sale price.	
	Show that the total saving is the same as 68% off the original price.	
	(3 marks)	

# END OF SECTION A







