

B271A

GENERAL CERTIFICATE OF SECONDARY EDUCATION MATHEMATICS C (GRADUATED ASSESSMENT)

MODULE M1 - SECTION A

M1

Morning Time: 30 minutes

MONDAY 21 JANUARY 2008

Candidates answer on the question paper

Additional materials: Geometrical instruments

Tracing paper (optional)



Candidate Forename				Candidate Surname				
Centre Number				Candidate Number				

INSTRUCTIONS TO CANDIDATES

- Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Show your working. Marks may be given for a correct method even if the answer is incorrect.
- Answer all the questions.
- Do not write in the bar codes.
- Do not write outside the box bordering each page.
- Write your answer to each question in the space provided.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this Section is 25.



You are not allowed to use a calculator in Section A of this paper.

FOR EXAM	NER'S USE
SECTION A	
SECTION B	
TOTAL	

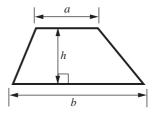
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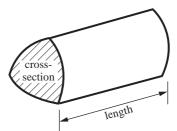


Formulae Sheet

Area of trapezium = $\frac{1}{2}(a + b)h$



Volume of prism = (area of cross-section) \times length



PLEASE DO NOT WRITE ON THIS PAGE

1	Work	0114
	VV () I K	()111

(a) 8×6

(a).....[1]

(b) 45 ÷ 9

(b)[1]

(c) 57 + 28

(c).....[1]

(d) 72 – 35

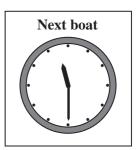
(d)[1]

4

2	Lena is	going	on a	boat	trip.
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(a) She arrives at 11:10 am. The boat leaves at 11:30 am.

How long does she have to wait for the boat?



(a)..... minutes [1]

(b) Lena buys two adult tickets and three child tickets.

Adult	£12.00
Child	£6.00

How much does she pay altogether?

(b) £[3]

(c) Everyone is asked what they thought of the trip. This pictogram shows some of the answers.

Excellent	Ť	Ť	Ť	Ť	Ť	Ť	Ť	Ť	
Good	Ť	Ť	Ť	Ť	Ť	1			
OK									
Poor	Ť	1							

Key	n = 2 people
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How many people said Excellent?

((\mathbf{c})	1	i)																													ı	Γ	1	1	i
١	· ·	"	ш	,	•	٠	٠	٠	٠		•	٠	٠	٠	٠	٠	٠	٠	•	•		٠	٠	٠	٠	٠	•	٠	•	٠	٠	٠		١.	1		

(ii) Ten people said **OK**.

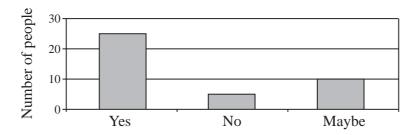
Show this on the pictogram.

[1]

How many people said **Poor**? (iii)

(iii)	 1	1
٠,	,	 -	

(d) Everyone is asked whether they would recommend this trip to a friend. This bar chart shows the answers.



How many people said Maybe?

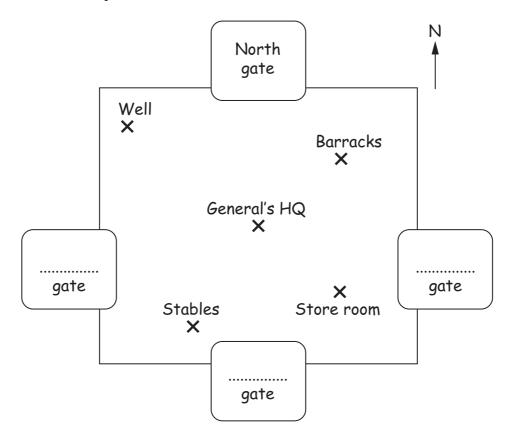
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۱	$\mathbf{u}_{\mathcal{N}}$)	IJ	L	ı

Lena said: Most people would recommend the trip to a friend.

Explain why the bar chart shows that Lena is correct.

[Turn over

3 (a) This is a sketch map of a Roman fort.



(i) The North gate is labelled.

Label the South gate, East gate and West gate.

[2]

(ii) Claire walks North West from the General's HQ.

Where does she get to next?

(a)(ii)......[1]

(b) The Romans invaded Britain in the year 43 AD.

Work out when the Romans left Britain.

Romans invaded Britain	year	43	AD
Romans stayed		367	years
Romans left Britain	year	•••••	AD

[2]

5

4	Her	e are the	e first fou	r terms of	a number patt	tern.			
		91	88	85	82				
	(a)	What is	s the next	t number i	in the pattern?				
							(2)		[11]
	(b)	Explain	n how yo	u worked	out your answ	er.	(a)	•••••	[1]
				•••••			 		
		••••••					 		[1]
5	(a)		lest towe 3 metres		orld is the <i>CN</i>	Tower in Canada			
		Write 5	553 to the	nearest h	undred.				
							(a)		[1]
	(b)		lest build 9 metres		world is <i>Taip</i>	<i>ei 101</i> in Taiwan.			
		Write 5	509 in wo	ords.					
							 		[1] 2

TURN OVER FOR QUESTION 6

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6 Delvin is at the gym.

The clock shows the time he starts training.



(a) What time does the clock show?

(a)																																							Γ	1	1	ı
l	ш	,	•	•	•	٠	•	٠	٠	•	٠	٠	•	٠	•	٠	٠	٠	٠	٠	٠	•	•	• •	•	•	•	٠	٠	٠	٠	•	٠	•	٠	•	٠	•	٠	.	l	1	. [ı

(b) He warms up for 5 minutes. He then runs for 40 minutes. He stretches for 10 minutes.

At what time does he finish his training?

(**b**)[2]

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