

B271B

M1

GENERAL CERTIFICATE OF SECONDARY EDUCATION MATHEMATICS C (GRADUATED ASSESSMENT)

MODULE M1 - SECTION B

MONDAY 21 JANUARY 2008

Morning Time: 30 minutes

Candidates answer on the question paper **Additional materials:** Geometrical instruments

Tracing paper (optional)

Electronic calculator



Candidate Forename	I			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 expected to use a calculator in Section B of this paper.
- Section B starts with question 7.

FOR EXAM	NER'S USE
SECTION B	

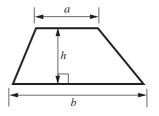
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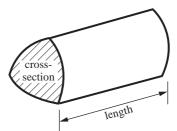


Formulae Sheet

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

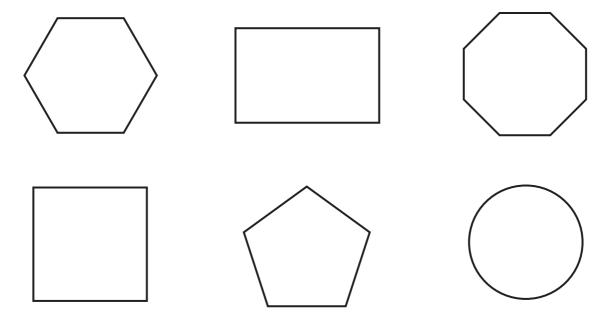


Volume of prism = (area of cross-section) \times length

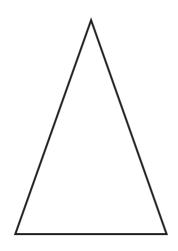


PLEASE DO NOT WRITE ON THIS PAGE

7 (a) Look at these shapes.



- (i) Write P inside the pentagon.
- (ii) Write O inside the octagon. [1]
- **(b)** Measure the perimeter of the triangle below. Give your answer in centimetres.





4

[1]

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8	(a)	The length of a swimming pool is 20 metres.
		John swims 45 lengths of the swimming pool.

How many metres does he swim altogether?

(a) m	ı [2]

(b) Ashia is going to swim three lengths.

She can swim Crawl, Fly and Back stroke.

She is going to swim one length of each.

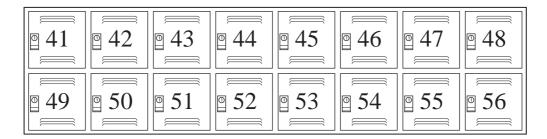
You may not need all the lines.

Write down all the different ways she can swim 3 lengths. The list has been started for you.

First length	Second length	Third length
Crawl	Fly	Back

[2]

(c) John uses one of these lockers



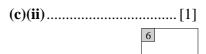
(i) John's locker has an even number.

Circle all the lockers which have an even number.

[1]

(ii) John's locker has a number which is also divisible by 5.

What number is John's locker?



9 Ray buys a pack of 12 ice creams.

The pack contains

- 6 vanilla
- 2 chocolate
- 4 strawberry.

Ray takes one of these ice creams without looking.



Choose the best word to complete each of these sentences.

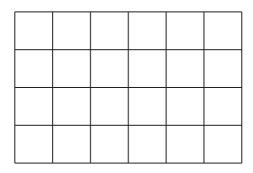
It is that this ice cream is chocolate. [1]

It is that this ice cream is vanilla. [1]

2

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10 (a) Shade $\frac{1}{4}$ of this shape.



[1]

(b) Work out $\frac{3}{4}$ of 24.



!

11 Fill in the missing numbers in these machines.



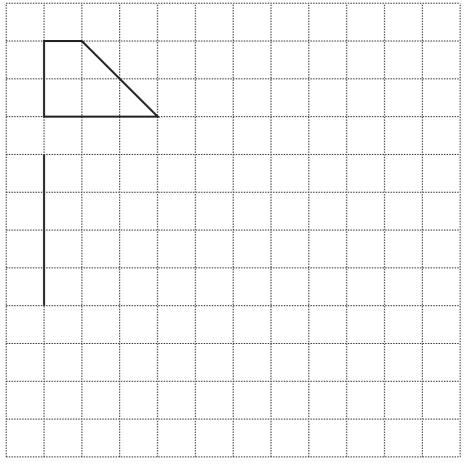
(c) ÷ 2 → 10 [1]

12	Complete	thaga	contonooc
14	Complete	uiese	semences

1 centimetre is the same as millimetres.	
0.5 centimetres is the same as millimetres.	
centimetres is the same as 24 millimetres.	[2]
	2

13 Draw a 2 times enlargement of the shape below. The first line has been drawn for you.

The first fine has been drawn for you.



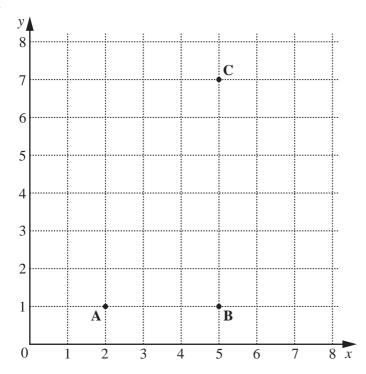
[4	

2

TURN OVER FOR QUESTION 14

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14



(a) Write down the coordinates of point B.

(a)	(`	Г1	1
(a)	(,	• • • • • • • • • • • • • • • • • • • •	,	լյ	IJ

(b) Point D is at (2, 7).

Plot point D on the grid.

[1]

(c) Join points A, B, C and D to make a rectangle.

Find the area of rectangle ABCD.

(c).....cm² [1]

(d) Draw a straight line from point A to point C.

Measure the line AC. Give your answer in millimetres.

(**d**) [1]

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