

B277A

M7

MODULE M7 - SECTION A

Morning
Time: 30 minutes

TUESDAY 24 JUNE 2008

Candidates answer on the question paper **Additional materials (enclosed):** None

Additional materials (required):

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.

GENERAL CERTIFICATE OF SECONDARY EDUCATION MATHEMATICS C (GRADUATED ASSESSMENT)

- 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.
- 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 EXAMINER'S USE						
SECTION A						
SECTION B						
TOTAL						

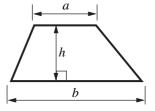
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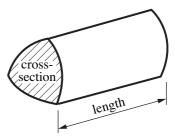


Formulae Sheet

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



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



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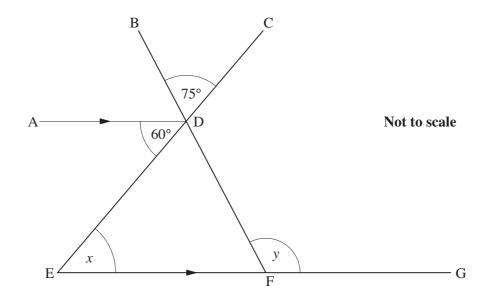
1	(a)	Estimate the answer to this calculation.
		Show clearly the values you use.

$$\frac{\sqrt{65} \times 39.6}{15.8}$$

(b)	Work out. $\sqrt{144} + 4^3$	(a)[2]
		(b) [2]
(c)	This is part of Gareth's homework.	
	26·8 × 0·92 = 29·656	
	Explain how you can tell his answer is wrong. You do not need to work out the correct answer.	

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EFG is a straight line parallel to AD. CDE and BDF are straight lines. Angle ADE = 60° and angle BDC = 75° .

(a)	Find angle <i>x</i> .	

Give a reason for your answer.

$x = \dots$ because	
	FO 3
	[2]

(b) Find angle *y*. Give reasons for your answer.

<i>y</i> =	 because	 	 	 	
					[3]

3	The three angles of a triangle, a , b and c , are in the ratio $3:5:7$.	
	Calculate the size of each angle.	
		<i>a</i> =°
		b =°
		c =° [3]
4	The perimeter of this rectangle is 86 cm.	
	(3x+10) cm	
	15 cm	
	15 cm	
	Form an equation in x and solve it to find x .	
		[3]

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5	(a)	Write 63 as a prod	uct of its prime factors.	
	(b)	Find the lowest co	ommon multiple (LCM) of 42 and 63.	(a)[2
5	(a)	Solve.	3(4x-5)=15	(b) [2
	(b)	Expand.	(x+3)(x-4)	(a)[3
				(b) [2

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