

**GENERAL CERTIFICATE OF SECONDARY EDUCATION
 MATHEMATICS C (GRADUATED ASSESSMENT)
 MODULE M4 – SECTION B**

M4

TUESDAY 24 JUNE 2008

Morning
 Time: 30 minutes

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

Additional materials (required):
 Geometrical instruments
 Tracing paper (optional)
 Electronic calculator



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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.
- Write your answer to each question in the space provided.

INFORMATION FOR CANDIDATES

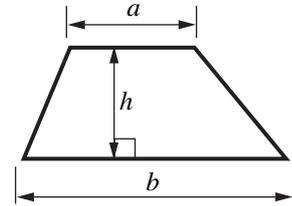
- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this Section is **25**.
- Section B starts with question 9.
- You are expected to use a calculator in Section B of this paper.

FOR EXAMINER'S USE	
SECTION B	
TOTAL	

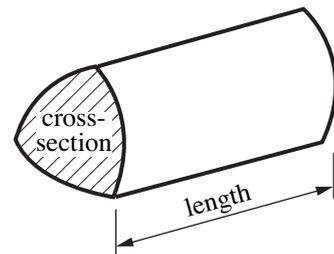
This document consists of 7 printed pages and 1 blank page.

Formulae Sheet

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

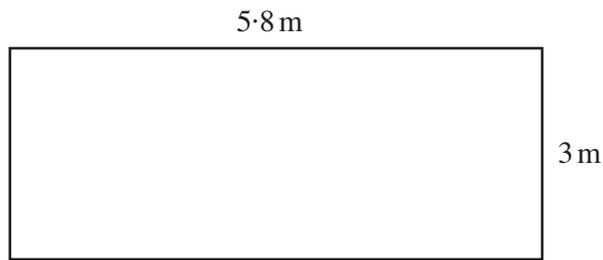


Volume of prism = (area of cross-section) \times length



PLEASE DO NOT WRITE ON THIS PAGE

- 9 Work out the area of this rectangle.



Not to scale

.....m² [2]

- 10 (a) Here are the first four terms of a sequence.

32 31 29 26

- (i) Write down the next two terms of this sequence.

(a)(i) and [2]

- (ii) Explain how you worked out your answers.

..... [1]

- (b) Solve.

$$x - 2 = 14$$

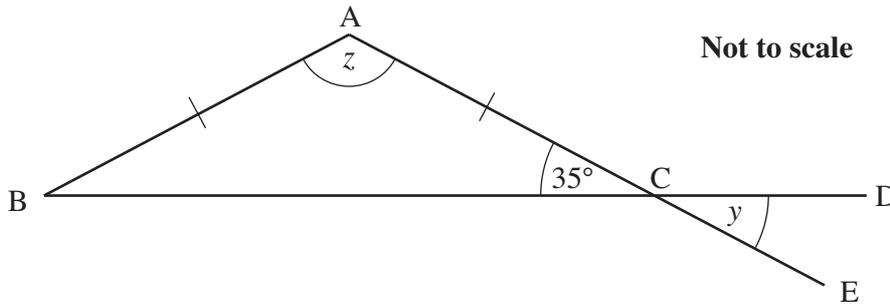
(b) [1]

11 Li Chan buys 27 litres of petrol.

Roughly, how many gallons is this?

.....gallons [2]

12 In this diagram $AB = AC$.



Work out angles y and z , giving reasons for your answers.

(a) Angle y is $^{\circ}$ because
 [2]

(b) Angle z is $^{\circ}$ because
 [3]

- 13 Sabrina walks her dog each day.
She records the time, in minutes, for twelve walks.

18 31 22 29 44 56
19 49 58 72 28 15

- (a) Work out the range of these times.

(a) minutes [1]

- (b) Work out the mean time of these walks.

(b) minutes [3]

14

Candle Making		
Wax	£1.45	per kg
Wick	35p	per metre

Becky is going to make some candles.
She buys 2.6 kg of wax and 0.8 m of wick.
Becky pays with a £5 note.

How much change should she get?
Give the units of your answer.

..... [5]

- 15** This is a recipe for Walnut Cakes.
It is for 12 cakes.

Walnut Cakes	
(makes 12)	
100g	Margarine
80g	Flour
75g	Sugar
15ml	Syrup
1	Egg
30ml	Milk
50g	Walnuts

- (a) How much flour would you need to make 48 cakes?

(a) g [1]

- (b) Colin has 150 g of walnuts and plenty of the other ingredients.

How many cakes could he make?

(b) [1]

- (c) How much syrup is needed to make 6 cakes?

(c) ml [1]

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