

**GENERAL CERTIFICATE OF SECONDARY EDUCATION
 MATHEMATICS C (GRADUATED ASSESSMENT)
 MODULE M3 – SECTION A**

M3

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)



* C U P / T 6 6 9 1 5 *

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**.



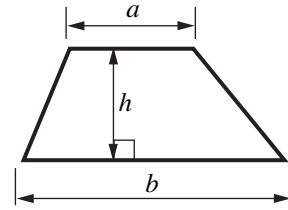
WARNING
 You are not allowed to use a calculator in Section A of this paper.

FOR EXAMINER'S USE	
SECTION A	
SECTION B	
TOTAL	

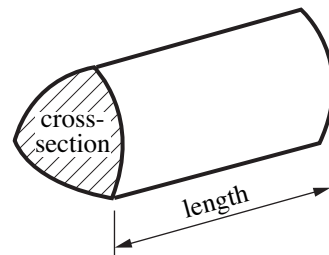
This document consists of **8** printed pages.

Formulae Sheet

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



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



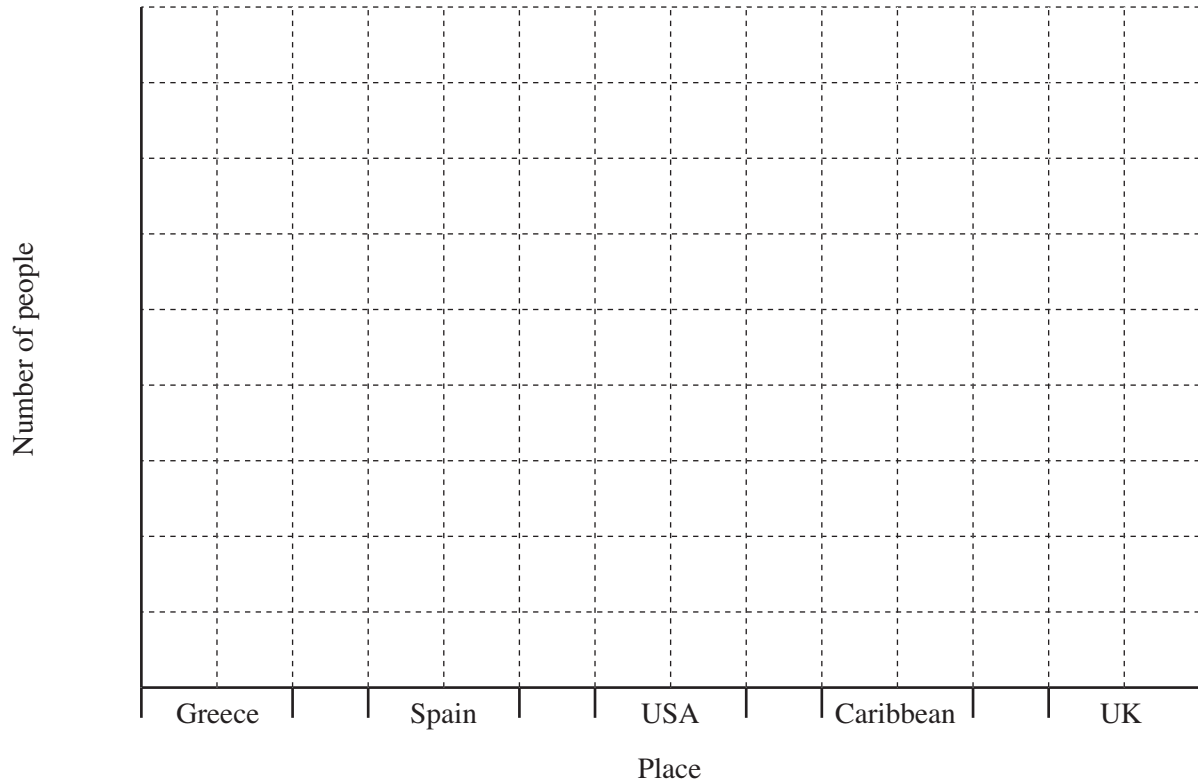
PLEASE DO NOT WRITE ON THIS PAGE

- 1 Paul did a survey to find out where people would like to go for a holiday.

His results are shown in this table.

Place	Greece	Spain	USA	Caribbean	UK
Number of people	5	3	8	6	3

Draw a bar chart to represent this information.



[3]

2 Junaid is playing a game with these cards.



He picks one card without looking.

(a) Which number is Junaid **most likely** to pick?

(a) [1]

(b) What is the probability that he picks a 4?

(b) [1]

(c) What is the probability that he picks a 2?

(c) [1]

- 3 (a) Three storage boxes are piled on top of each other.
Each box is 0.4 m high.

Work out the **total** height of the pile.

(a) m [2]

- (b) Ten of these boxes cost £15.

What is the cost of one box?

(b) £ [2]

- 4 Solve.

(a) $2 + x = 12$

(a) [1]

(b) $3x = 27$

(b) [1]

(c) $x - 7 = 9$

(c) [1]

5 Mr McKenzie is organising a class trip to a museum.

- (a) There are 30 students in his class.
20% of the students have not yet paid for the trip.

How many students have not yet paid?

(a) [2]

- (b) They must arrive at the museum at 10:45 am.
The journey to the museum takes 30 minutes.

At what time must they leave school?

(b) [1]

- (c) This is the plan for their activities at the museum.

Exhibition	1 hour
Film show	45 minutes
Lunch	30 minutes
Workshop	1 hour 30 minutes

- (i) How long do the activities last altogether?
Give your answer in hours and minutes.

(c)(i) hours minutes [2]

- (ii) The activities will start at 11:00 am.

At what time will the activities finish?

(ii) [1]

6 A bag contains 200 cubes.

$\frac{1}{4}$ of the cubes are blue.

$\frac{3}{10}$ of the cubes are red.

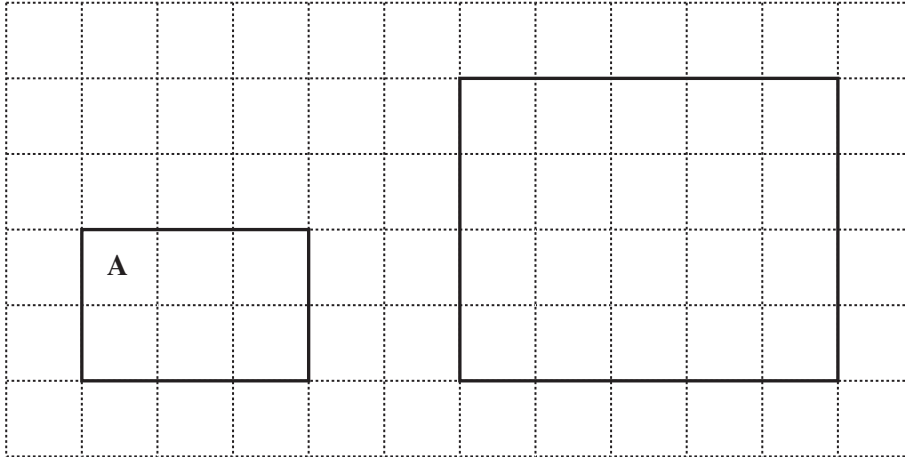
The rest of the cubes are green.

How many of the cubes are green?

..... [3]

TURN OVER FOR QUESTION 7

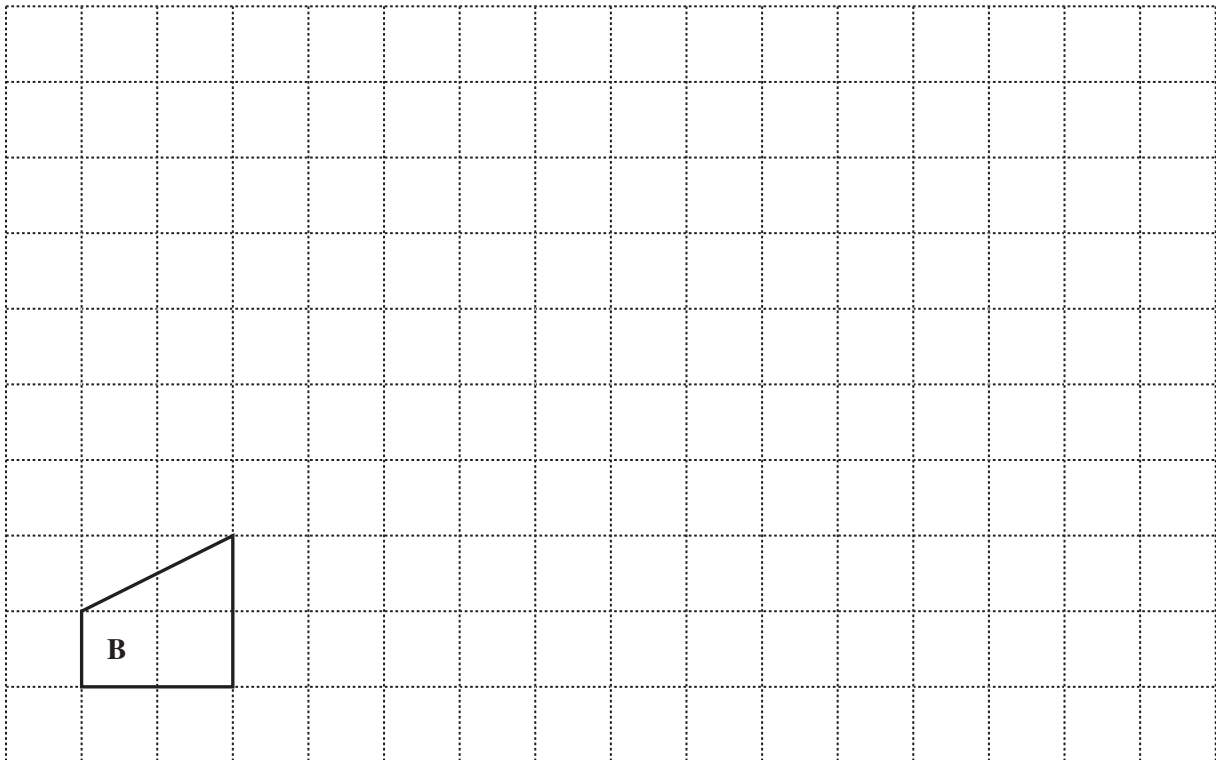
- 7 (a) Moira has tried to draw an enlargement of shape **A** with scale factor 2. Her enlargement is not correct.



Explain why her enlargement is not correct.

..... [1]

- (b) Draw an enlargement of shape **B** on the grid below. Use a scale factor of 3.



[2]

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