

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

MATHEMATICS C
(Graduated Assessment)



1966/2335A

MODULE M5 – SECTION A

Wednesday **28 JUNE 2006** Morning 30 minutes

Candidates answer on the question paper.

Additional materials:

- Geometrical instruments
- Tracing paper (optional)
- Pie chart scale (optional)

Candidate
Name

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Centre
Number

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Candidate
Number

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TIME 30 minutes

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and candidate number in the boxes above.
- Answer **all** the questions.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- In many questions marks will be given for a correct method even if the answer is incorrect.
- Do **not** write in the bar code.
- Do **not** write outside the box bordering each page.
- **WRITE YOUR ANSWER TO EACH QUESTION IN THE SPACE PROVIDED. ANSWERS WRITTEN ELSEWHERE WILL NOT BE MARKED.**

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.

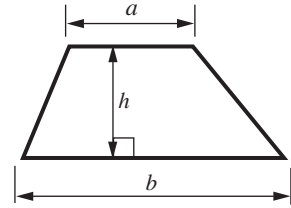
WARNING
**You are not allowed to use a
calculator in Section A of this paper.**

FOR EXAMINER'S USE	
Section A	
Section B	
TOTAL	

This question paper consists of 7 printed pages and 1 blank page.

Formula Sheet

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



PLEASE DO NOT WRITE ON THIS PAGE

1 Work out.

(a) 7^2

(a)[1]

(b) $\sqrt{25}$

(b)[1]

(c) 4^3

(c)[1]

3

2 Here is the rule for a sequence.

Multiply the previous number by 2 and then subtract 1

The first term of this sequence is 3.

(a) Work out the next four terms.

(a) 3 ,,,,[2]

(b) Without doing any working, explain why the tenth term cannot be 1026.

.....
.....[1]

3

- 3 (a) Tom has won a two-week holiday to Italy.
 He can stay in Rome (R), Florence (F) or Venice (V).
 He can choose any one of the cities for the first week.
 He can choose the same city or a different city for the second week.

(i) Complete this table to show all his possible choices for a two-week holiday.

First week	Second week
R	R
R	F

You may not need all the lines.

[2]

- (ii) Tom cannot make his mind up.
 Without looking he sticks a pin in the list.
 Each combination is equally likely.

What is the probability he will stay in Rome for at least one of the two weeks?

(a)(ii)[1]

- (b) Tom has £50 to pay for a day trip.
 The exchange rate is £1 = €1.48.
 The day trip costs €80.

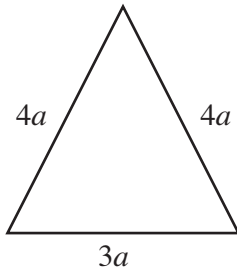
Does Tom have enough money to pay for the trip?
 Show how you decide.
 You do not need to do an exact calculation.

..... because

.....[2]

5

- 4 (a)



Write down, as simply as possible, an expression for the **perimeter** of this triangle.

(a)[1]

- (b) Simplify.

$$4q + 3r + 7q - 7r$$

(b)[2]

- (c) Work out $6x - 9$ when $x = 5$.

(c)[2]

5

[Turn over

- 5 The table lists some statements about four-sided shapes.

Complete the table by filling in the columns for the kite and the parallelogram.

Use a ✓ for those statements that are true and a ✗ for those that are false.

The rectangle has been done for you.

Statements	Rectangle	Kite	Parallelogram
Both pairs of sides parallel	✓		
All angles equal	✓		
All sides equal	✗		
Diagonals bisect each other	✓		
The shape has reflection symmetry	✓		

[2]

2

- 6 (a) Complete the following equivalent fractions.

(i) $\frac{3}{5} = \frac{\square}{20}$

[1]

(ii) $\frac{7}{\square} = \frac{42}{54}$

[1]

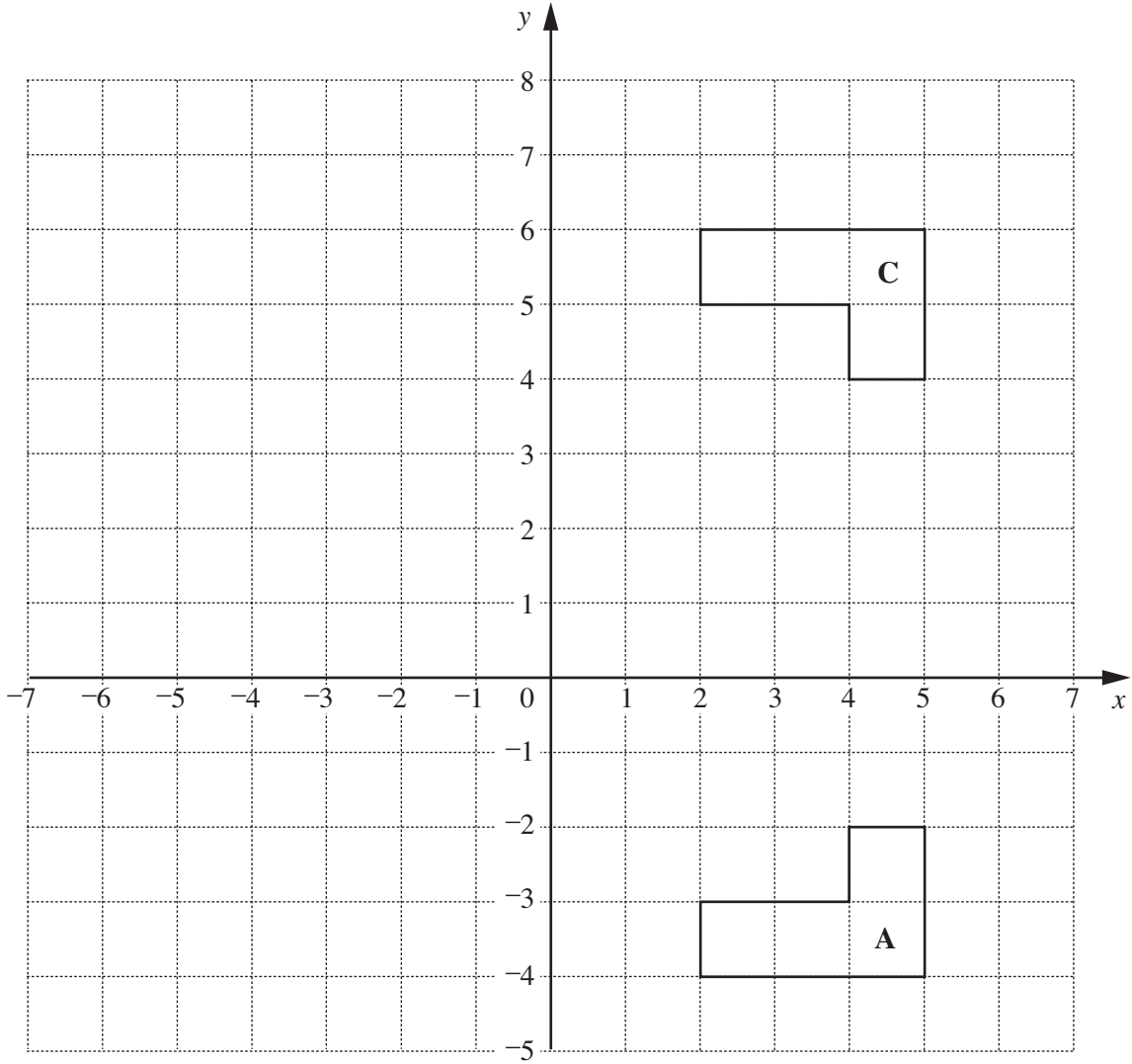
- (b) Write these fractions in order, starting with the smallest.
Show how you decide.

$$\frac{2}{3} \quad \frac{3}{4} \quad \frac{7}{12}$$

.....
smallest

[2]

4



(a) Translate shape **A** by 8 units left and 5 units up.
Label the image **B**.

[1]

(b) Describe the **single** transformation that maps shape **A** onto shape **C**.

.....
.....[2]

3	
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