

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

MATHEMATICS C
(Graduated Assessment)



1966/2334B

MODULE M4 – SECTION B

Monday **23 JANUARY 2006** Morning 30 minutes

Candidates answer on the question paper.

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

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.
- Write your answers on the dotted lines unless the question says otherwise.
- 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.
- There is a space after most questions. Use it to do your working. 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 in the grey area between the pages.
- **DO NOT WRITE IN THE AREA OUTSIDE THE BOX BORDERING EACH PAGE. ANY WRITING IN THIS AREA WILL NOT BE MARKED.**

INFORMATION FOR CANDIDATES

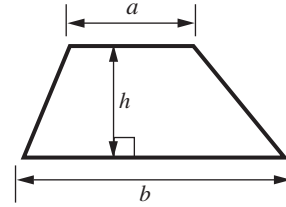
- You are expected to use a calculator in Section B of this paper.
- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this Section is 25.
- Section B starts with question 6.

FOR EXAMINER'S USE	
Section B	

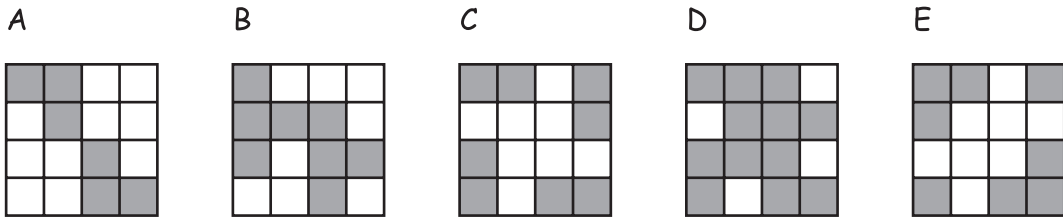
This question paper consists of 7 printed pages and 1 blank page.

Formula Sheet

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



6 (a) Put a tick (✓) under the patterns which have rotational symmetry.



..... [2]

(b) Complete these sentences about the patterns.

Pattern has rotation symmetry order 4. [1]

Pattern has lines of reflection symmetry. [1]

4	
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7 Solve.

(a) $x - 3 = 12$

(a) [1]

(b) $5x = 18$

(b) [1]

2	
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8 Rob is making necklaces from beads.

(a) This table shows the weight of each type of bead.

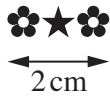
Bead	Star ★	Sun ☀	Moon ☾	Heart ♥	Diamond ✦	Flower 🌸
Weight (grams)	0.3	0.35	0.095	0.55	0.285	0.4

Work out the **total** weight of the beads in this necklace.

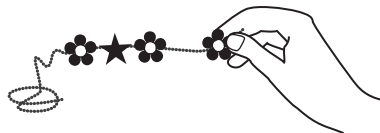


(a) g [4]

(b) Rob makes a pattern using the beads.
The pattern is 2 centimetres long.



Rob repeats this pattern to make necklaces.



(i) One of his necklaces has 15 stars.

How long is this necklace?

(b)(i) cm [1]

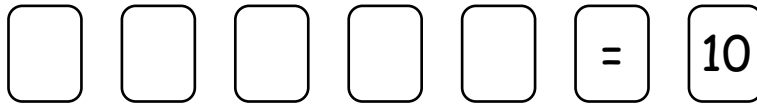
(ii) How many beads does he need for a necklace 36 cm long?

(ii) [1]

9 Here are nine cards.

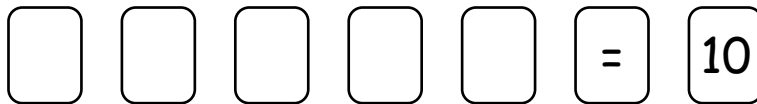


(a) Show one way to use five of the cards to make the answer 10.

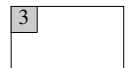


[2]

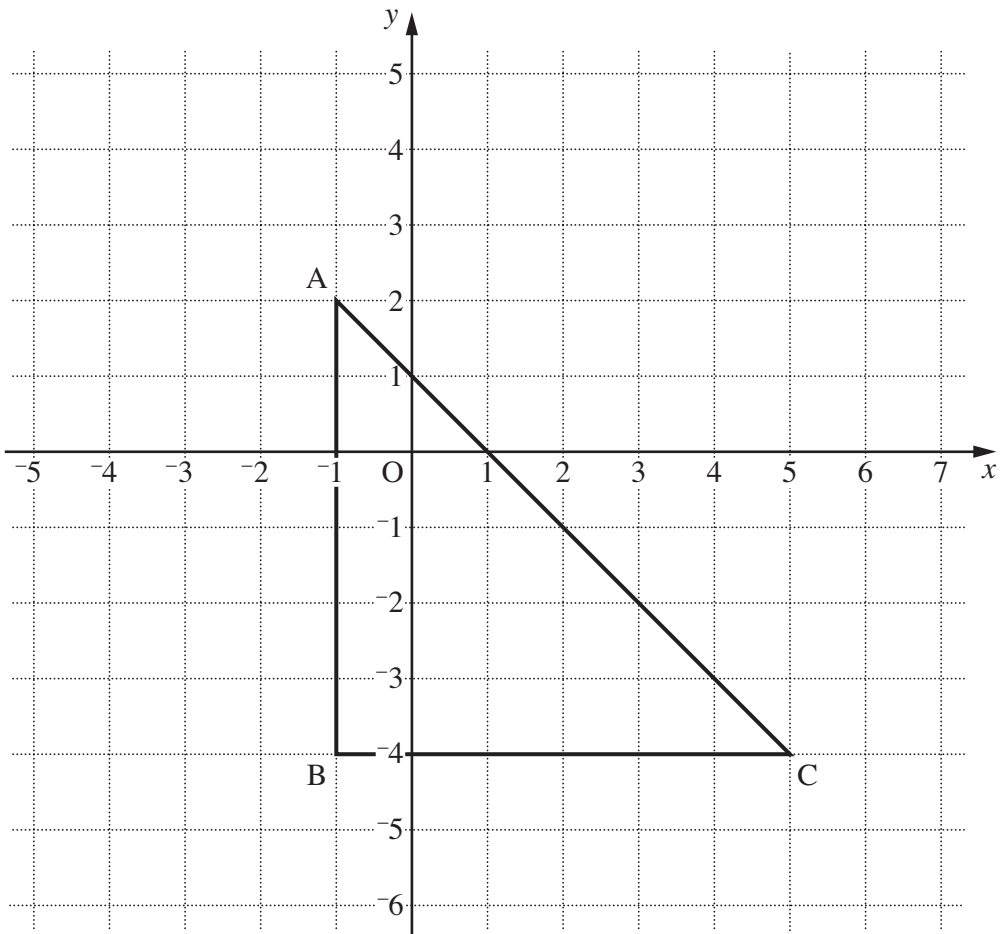
(b) Show a different way to use five of these cards to make the answer 10.



[1]



10 This is a centimetre square grid.



(a) Find the area of triangle ABC.

(a) cm² [2]

(b) Write down the coordinates of point B.

(b) (.....,) [1]

(c) Point D lies on the line AB.
It is twice as far from A as it is from B.

Label point D on the diagram.

[1]

(d) Write down the coordinates of the midpoint of AC.

(d) (.....,) [1]

5

11 Anjum and Alice carried out a survey.

(a) Anjum asked 10 people how many packets of crisps they had each eaten in the last week. Here are her results.

14 11 10 7 5 2 9 4 21 2

Find the mean number of packets eaten.

(a)[3]

(b) Alice asked 30 people how many bars of chocolate they had each eaten in the last week. Here is a summary of her results.

Chocolate survey: 30 people surveyed
Mean number of bars eaten: 13.2
Range: 32

Make two comments comparing the results of the two surveys.

1.
.....[1]

2.
.....[1]

5

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