

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

MATHEMATICS C
(Graduated Assessment)



1966/2334A

MODULE M4 – SECTION A

Wednesday **29 JUNE 2005** Morning 30 minutes

Candidates answer on the question paper.

Additional materials:
 Geometrical instruments
 Tracing paper (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.
- 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

- 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.

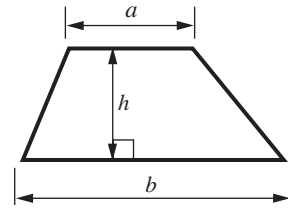
WARNING
 You are not allowed to use a
 calculator in Section A of this paper.

FOR EXAMINER'S USE	
Section A	
Section B	
TOTAL	

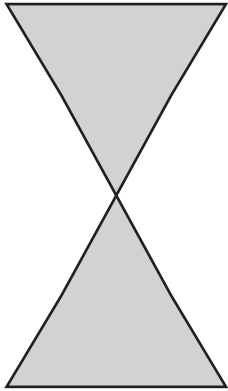
This question paper consists of 9 printed pages and 3 blank pages.

Formula Sheet

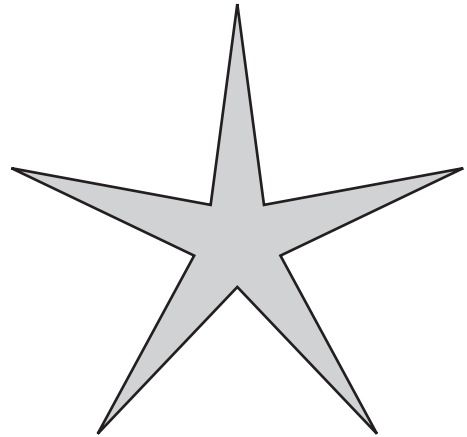
$$\text{Area of trapezium} = \frac{1}{2} (a + b)h$$



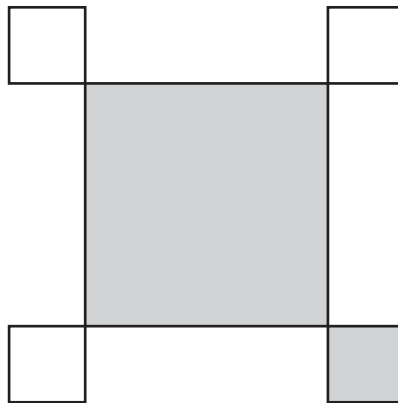
- 1 Under each diagram write its order of rotation symmetry.
If it has no rotation symmetry write 'none'.



.....



.....



.....

[3]

3

2 (a) Find two common factors of 18 and 30.

(a)
.....[2]

(b) Write down a number which is a multiple of 7 **and** a factor of 42.

(b)[1]

3

3 (a)

An image has been removed due to third party copyright restrictions

Special offer
12 batteries
for £7 20

Details:
An image of some batteries

What is the cost of one battery from this special offer?
Give your answer in pence.

(a)p [2]

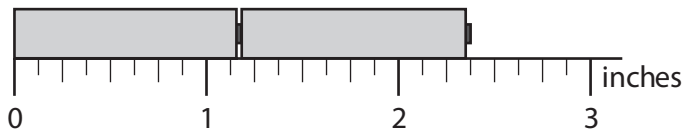
(b) (i) AAA batteries are $1\frac{3}{4}$ inches long.

Put an arrow on this scale to show $\frac{3}{4}$ inches.



[1]

(ii) What is the total length of these two batteries?



(b)(ii)inches [1]

4

[Turn over

4 Insects are eaten in many parts of the world.

(a) Crickets are 13% protein by weight.

Write 13% as a fraction.



(a)[1]

(b) One fifth of the weight of a grasshopper is protein.

(i) Write one fifth as a percentage.

(b)(i)% [1]

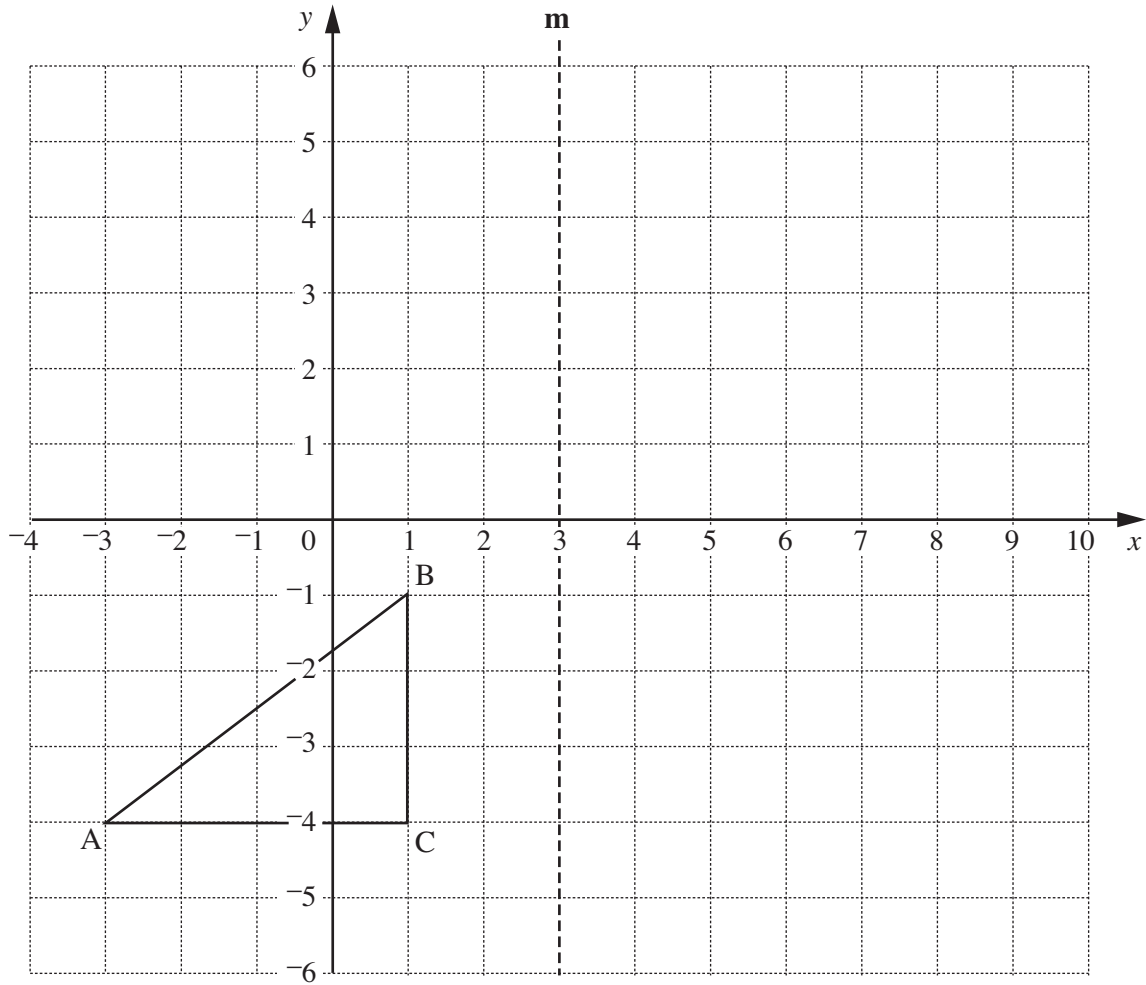
(ii) A serving of grasshopper weighs 30 g.

Work out one fifth of 30.

(ii)[1]

3

5



(a) Write down the coordinates of A.

(a) (.....,) [1]

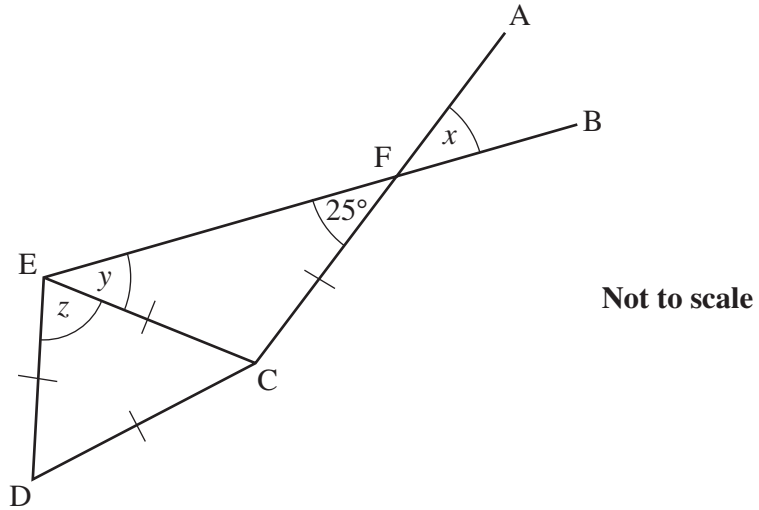
(b) Draw the reflection of triangle ABC in the mirror line **m**.

[2]

(c) Write down the new coordinates of A after reflection in the mirror line **m**.

(c) (.....,) [1]

4



In the diagram, EFB and CFA are straight lines.
 $DE = DC = EC = CF$.

Complete each of these statements.

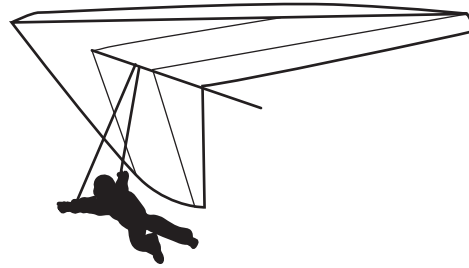
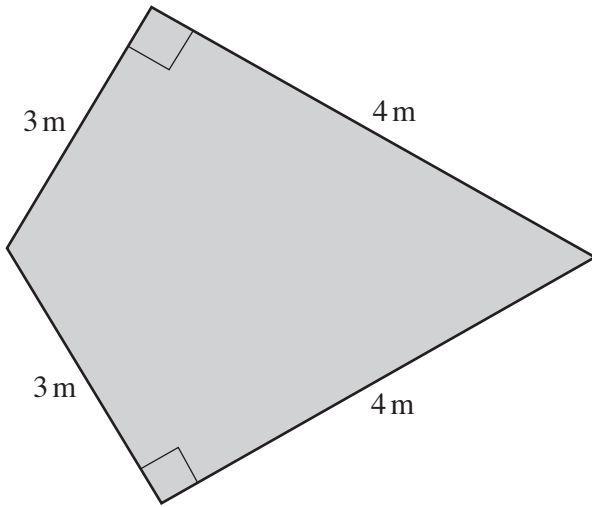
$x = 25^\circ$ because
[1]

$y = 25^\circ$ because
[1]

$z = \dots^\circ$ because
[2]

4

7 A hang-glider sail is shown below.

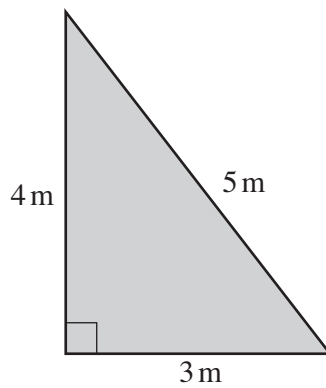


Not to scale

(a) Work out the perimeter of the sail.
Give the units of your answer.

(a)[2]

(b) Work out the area of this part of the sail.



Not to scale

(b)m² [2]

4
