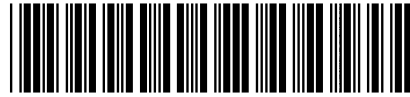


OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

MATHEMATICS C
(Graduated Assessment)



1966/2334A

MODULE M4 – SECTION A

Monday **23 JANUARY 2006** Morning 30 minutes

Candidates answer on the question paper.

Additional materials:
 Geometrical instruments
 Tracing paper (optional)

Candidate Name

Centre Number

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Candidate Number

--	--	--	--

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.

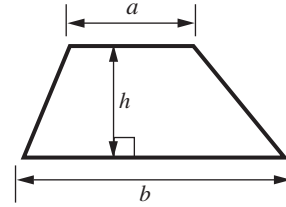
WARNING
 You are not allowed to use a calculator in Section A of this paper.

FOR EXAMINER'S USE	
Section A	
Section B	
TOTAL	

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

Formula Sheet

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



1 (a) Complete this table.

Decimal		Fraction
	is the same as	$\frac{3}{10}$
0.371	is the same as	
0.03	is the same as	

[2]

(b) Write the three decimals from the table in order, smallest first.

.....
smallest

[1]

3

2

	difference	factor	multiple	square
common factor		product	prime	sum

Choose the best words from the box to complete these sentences.

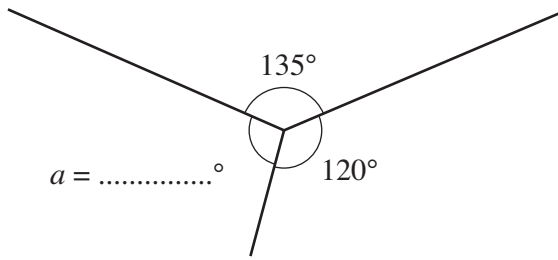
20 is a of 200. [1]

20 is a of 4. [1]

20 is a of 140 and 180. [1]

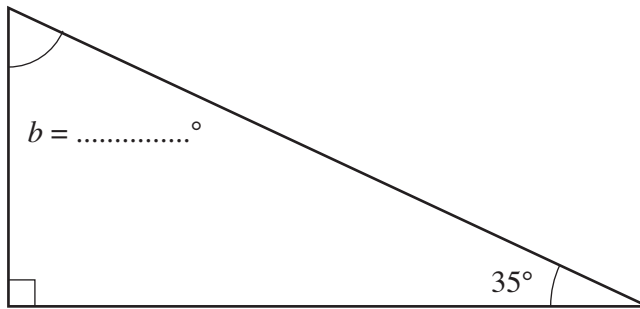
3

- 3 (a) Work out angles a , b and c .



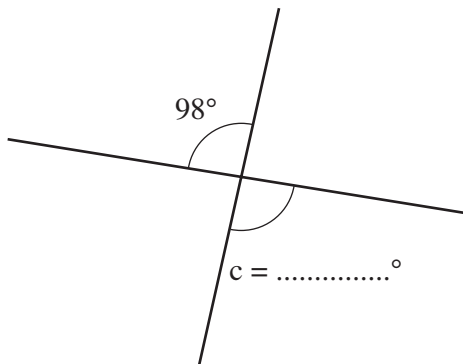
Not to
scale

[2]



Not to
scale

[2]



Not to
scale

[1]

- (b) Draw a pair of perpendicular lines.

[1]



- 4 (a) An express train from Birmingham to Newcastle has 14 coaches.
Each coach has 58 seats.

How many seats are there altogether?

You must show your working.

(a)[3]

- (b) The train travels 240 miles in 3 hours.

Work out the average speed in miles per hour.

(b) mph [2]

- (c) A record was kept of the train's arrival times for one month.
Here are the results.

Arrival	more than 5 minutes early	up to 5 minutes early	on time	up to 5 minutes late	between 5 and 10 minutes late	more than 10 minutes late
Frequency	1	3	12	9	4	2

What is the experimental probability that the train will be on time?

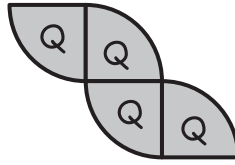
(c)[2]

7

[Turn over

5 All areas in this question are in centimetres squared.

(a)



The area of this shape is given by the formula

$$A = 4Q.$$

Find A when Q is 21.

(a)[2]

(b)



The area of this shape is given by the formula

$$A = R + 2Q.$$

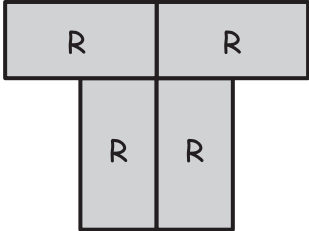
Find A when R is 6 and Q is 3.5.

(b)[2]


(c) Here are five area formulas.

$A = 4Q$	$A = 2Q + 2R$	$A = 4Q + 2R$
$A = 2Q + 4R$	$A = 4R$	

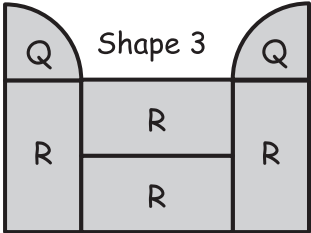
Match each formula to the correct shape.



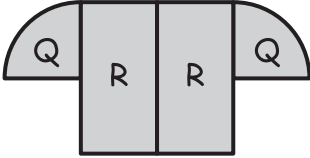
Shape 1



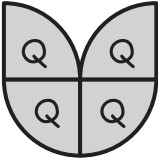
Shape 2



Shape 3



Shape 4



Shape 5

- $A = 4Q$ is Shape
- $A = 2Q + 4R$ is Shape
- $A = 2Q + 2R$ is Shape
- $A = 4R$ is Shape
- $A = 4Q + 2R$ is Shape

[2]

6

PLEASE DO NOT WRITE ON THIS PAGE