OXFORD CAMBRIDGE AND RSA EXAMINATIONS

General Certificate of Secondary Education

MATHEMATICS C
(Graduated Assessment)

1966/2332A

MODULE M2 – SECTION A

Wednesday   **28 JUNE 2006**   Morning   30 minutes

Candidates answer on the question paper.
Additional materials:
    Geometrical instruments
    Tracing paper (optional)

Candidate Name	

Centre Number					

Candidate Number				

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.
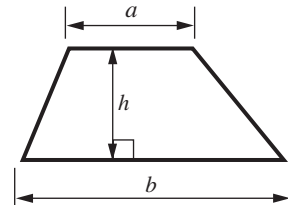
<table>
<tr><td rowspan="4">

WARNING

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

</td><td colspan="2">**FOR EXAMINER'S USE**</td></tr>
<tr><td>Section A</td><td></td></tr>
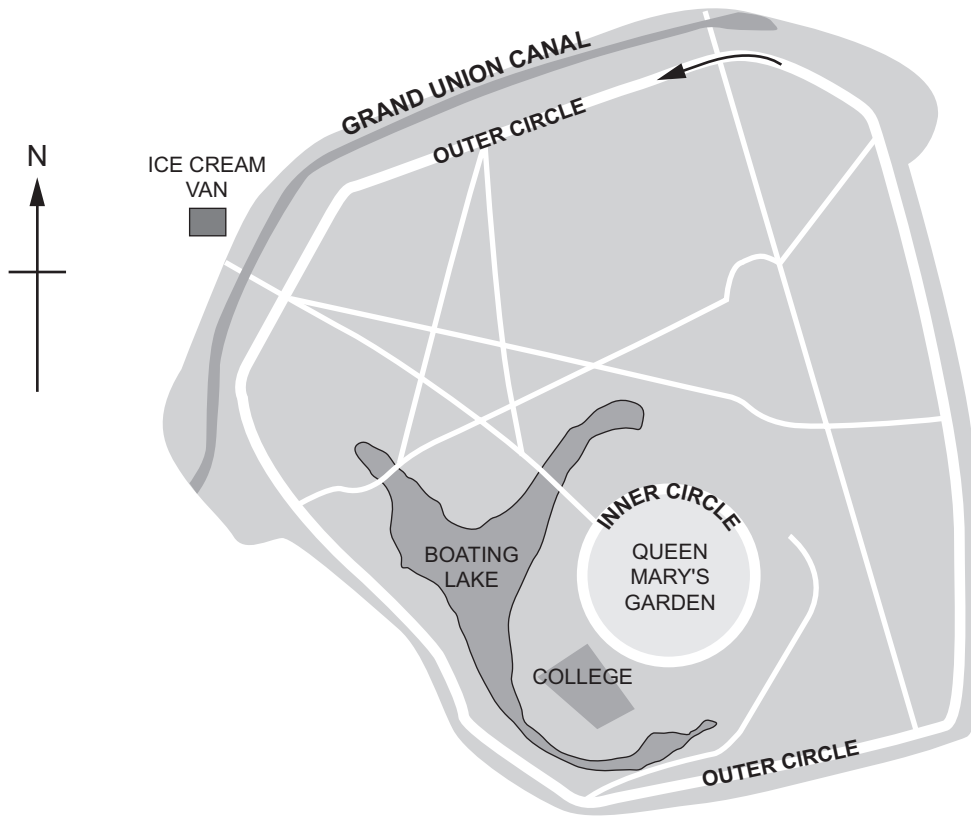<tr><td>Section B</td><td></td></tr>
<tr><td>TOTAL</td><td></td></tr>
</table>

This question paper consists of 8 printed pages.

[Turn over

Formula Sheet

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

PLEASE DO NOT WRITE ON THIS PAGE

1   This is a map of Regent's Park, London.

(a) Vicky is walking along the Outer Circle by the Grand Union Canal.
An arrow shows the direction she is walking.

Is she walking clockwise or anticlockwise?
Put a ring round your answer.

clockwise   anticlockwise   [1]

(b) Bert walks from Queen Mary's Garden to the ice cream van.

In which direction is he walking?

(b) ....[1]

2

[Turn over

2   Alice is carrying out a survey.
     She asks her school friends some questions.

(a)

> Did you watch TV last night?

Half her friends said **Yes**.

Write half as a percentage.

(a) ....% [1]

(b)

> How much does your family spend per month on digital TV?

Five families each spend £18 per month.
Three families each spend £42 per month.

How much is this altogether per month?

(b) £ ....[3]

(c)

> How many TVs are there in your house?
>
> **results:**   1   5   3   1   3
>   3   2   1   1   2

Find the median number of TVs.

(c) ....[2]

(d)

What is your favourite type of TV programme: soap, music, reality, or other?

The percentage bar shows the results for this question.
The labels have not been completed.

| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |

....
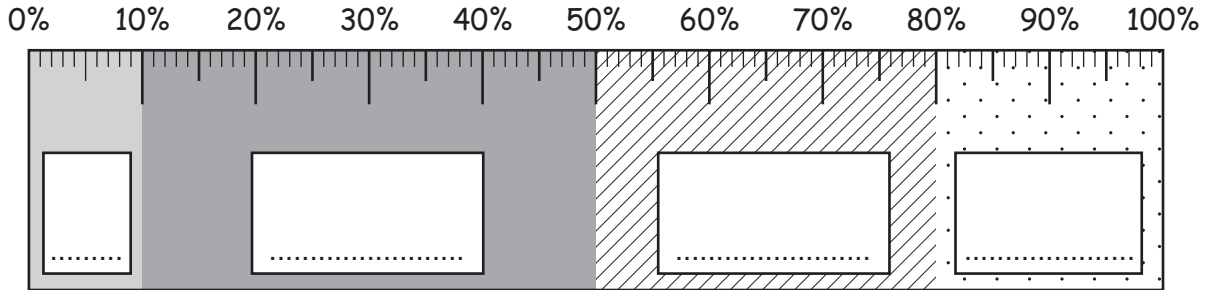
(i) Use this information to complete the labels on the bars.

10% said **music**

20% said **other**

30% said **soap**

the rest said **reality** [2]

(ii) Which type of TV programme is the mode?

(d)(ii) ....[1]

9

3 **(a)** Here is a pattern.

| 3 | 7 | 11 | 15 | | | |

(i) Fill in the next number in this pattern. [1]

(ii) Explain how you worked out your answer.

....[1]

(b) Here is a different pattern.

| 1 | 3 | 6 | 10 | 15 | | | |

Explain how to work out the next number in this pattern.

....[1]

3

[Turn over

4
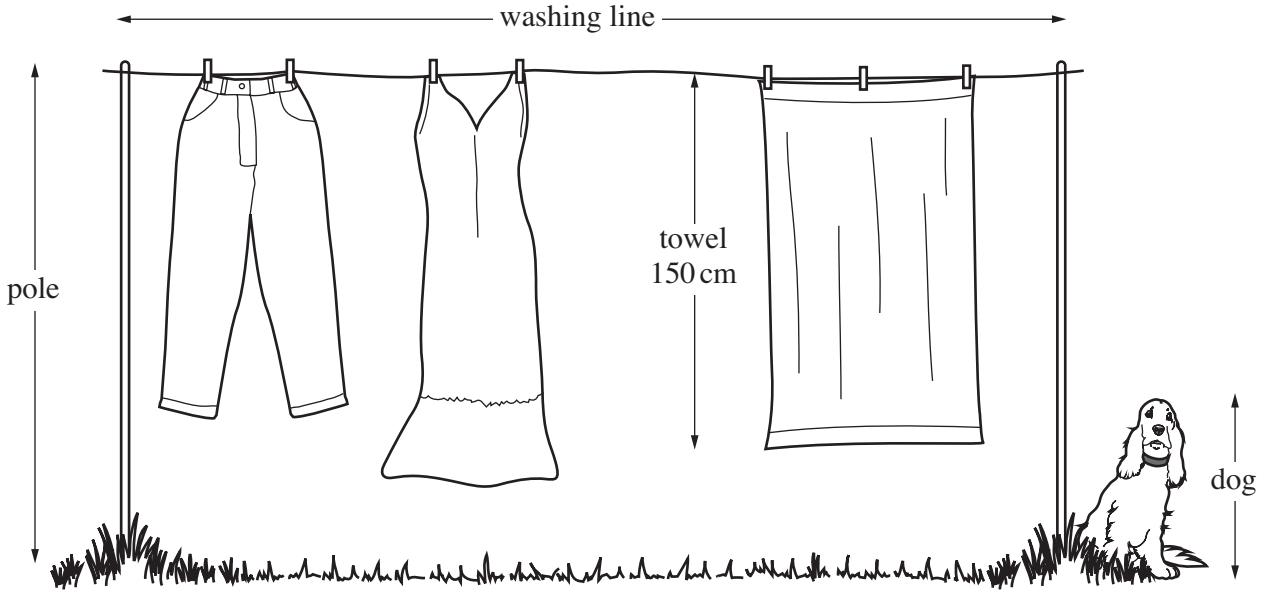
The towel is 150 cm long.

(a) Complete these sentences by estimating.

The washing line is about .... centimetres long.

The pole is about .... centimetres tall.

The dog is about .... centimetres tall. [3]

(b) Write 150 cm in metres.

(b) ....m [1]

(c) The wet towel weighs $3\frac{1}{2}$ kilograms.

How many grams is this?

(c) ....g [1]

5   Draw the line of symmetry on each pattern.
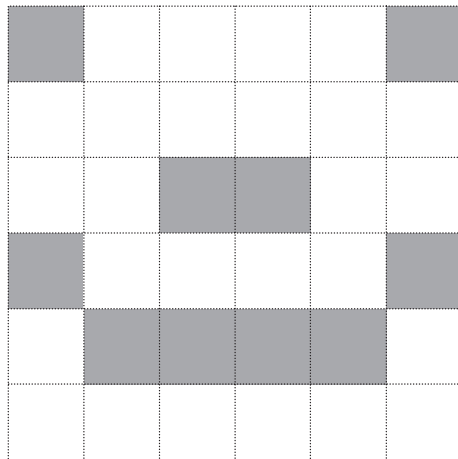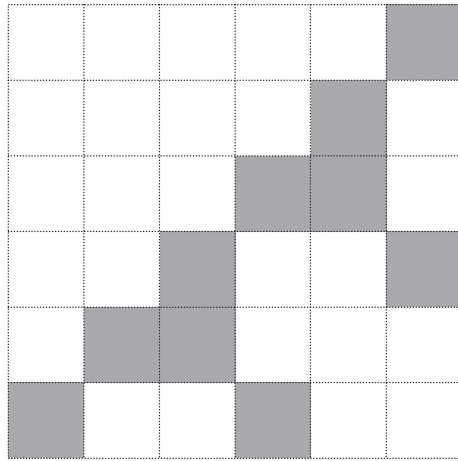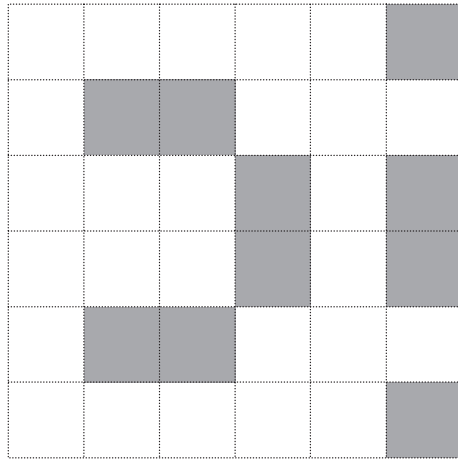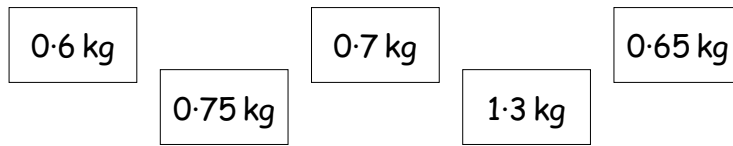
[3]

3

TURN OVER FOR QUESTION 6

6   Percy grows vegetables for a gardening competition.
     Here are the weights of his five biggest potatoes.

| 0·6 kg | | 0·7 kg | | 0·65 kg |

| 0·75 kg | | 1·3 kg |

(a) Complete this part of the competition entry form.

```
        Percy Potter - Potatoes

            1 · 3    kg        Heaviest

    -       0 · 6    kg        Lightest
    _____

    ..................... kg    Difference in weight
```
[1]

(b) Percy gets a certificate if the two heaviest potatoes weigh more than 2 kg altogether.

Does Percy get a certificate?
Complete this part of the entry form to show how you decide.

```
        Percy Potter - Potatoes

            1 · 3    kg        Heaviest

    +       0 · 7 5  kg        Second Heaviest
    _____

    ..................... kg    Total weight

    Certificate awarded:    Yes □      No □
```
[2]

3