OCR
RECOGNISING ACHIEVEMENT

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

MATHEMATICS C (Graduated Assessment)

1966/2333B

MODULE M3 – SECTION B

Tuesday **25 JANUARY 2005** Morning 30 minutes

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

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.
- Write your answers, in blue or black ink, on the dotted lines unless the question says otherwise.
- 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.

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 7.

FOR EXAMINER'S USE	
Section B	

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

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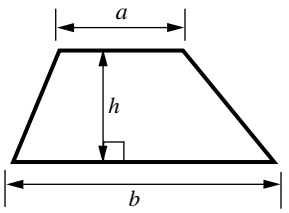
Formula Sheet

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



7 **(a)** A group of ten pupils each has a tube of sweets.
They each count the number of sweets in their own tube.
Here are their results.

43	44	38	37	43
42	43	40	38	42

Work out

(i) the range,

(a)(i) .....[1]

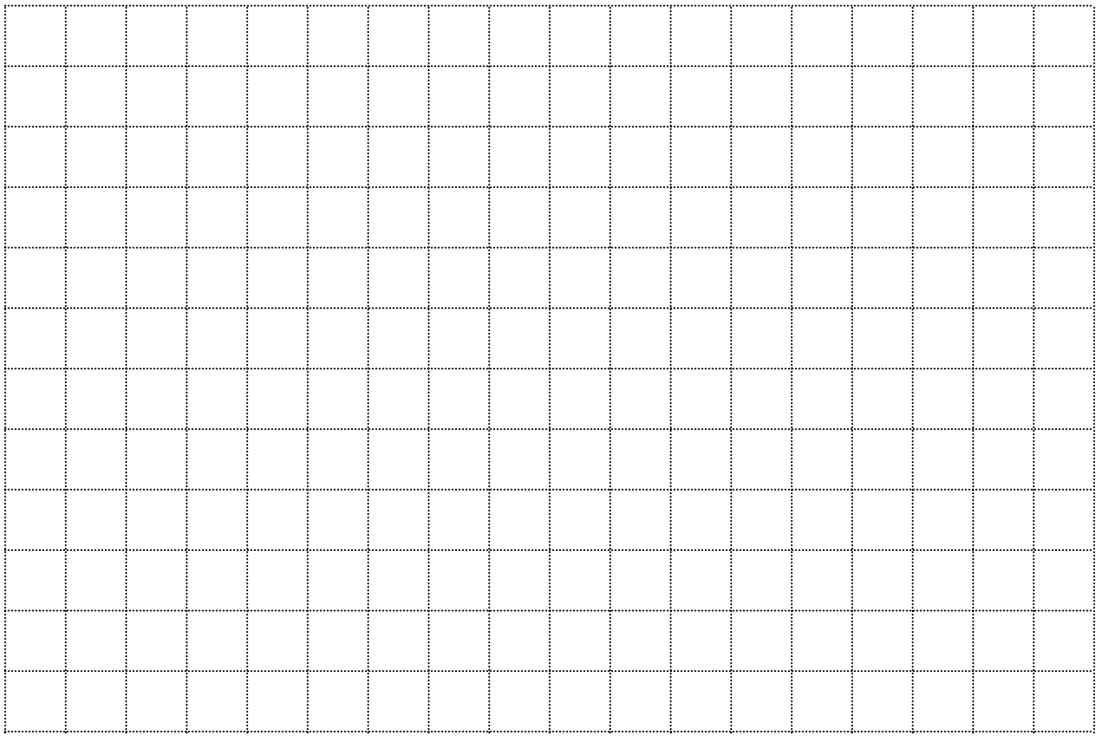
(ii) the mean.

(ii) .....[3]

(b) One pupil records the colour of each of her sweets.
Here are the results.

Colour	Red	Yellow	Green	Blue	Orange	Pink
Frequency	4	10	8	11	5	2

Use the grid below to draw a suitable diagram to represent these data.



[3]

7

8 Solve.

(a) $10 = s + 7$

(a) .....[1]

(b) $t - 3 = 4$

(b) .....[1]

(c) $5u = 15$

(c) .....[1]

3

9 **(a)** A shop uses this formula to work out the cost of printing invitations.

multiply 35p by the number of invitations
then add £4·50

Teresa orders 40 invitations.

How much does she pay?

(a) £ .....[2]

(b) Another shop uses this formula to work out the cost of printing invitations.

$$C = 0{\cdot}4 \times n$$

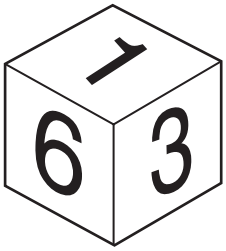
C is the cost in pounds.
n is the number of invitations.

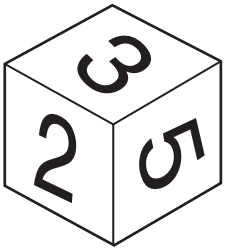
What is the cost of 40 invitations from this shop?

(b) £ .....[1]

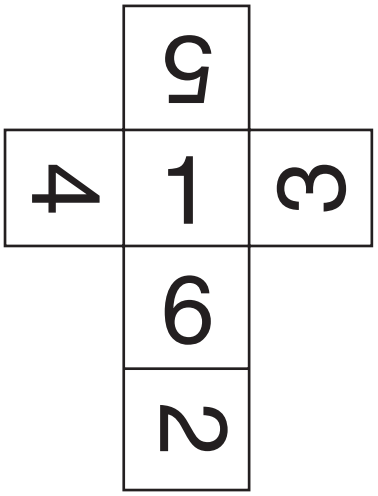
3

10 Sajid has written the numbers 1 to 6 randomly on a blank dice.
Here are two views of his dice.





Which of these nets could fold to make his dice?
Put a tick under those that do.



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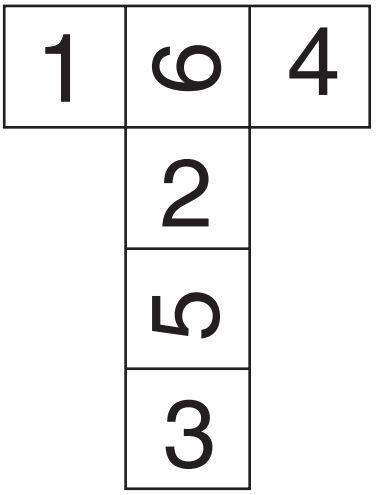

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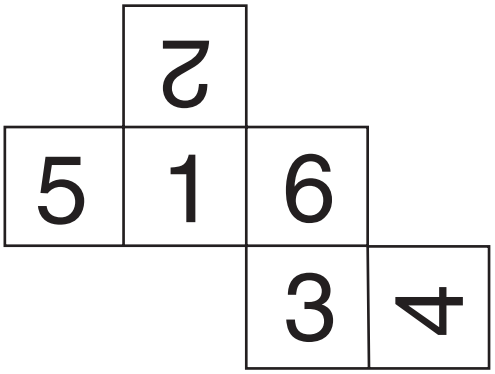

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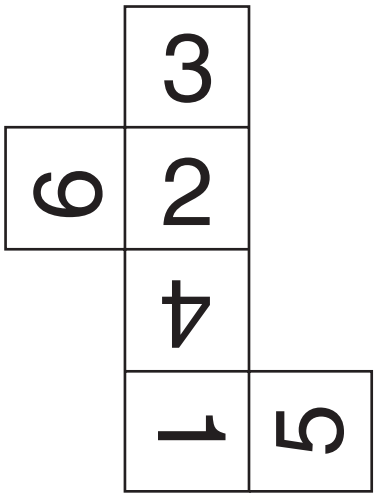

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[2]

2

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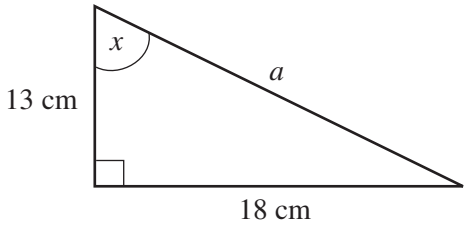
11 Write these volumes in order, smallest first.

$\frac{1}{2}$ litre 2 litres 200 ml 0·7 litre

.... [2]

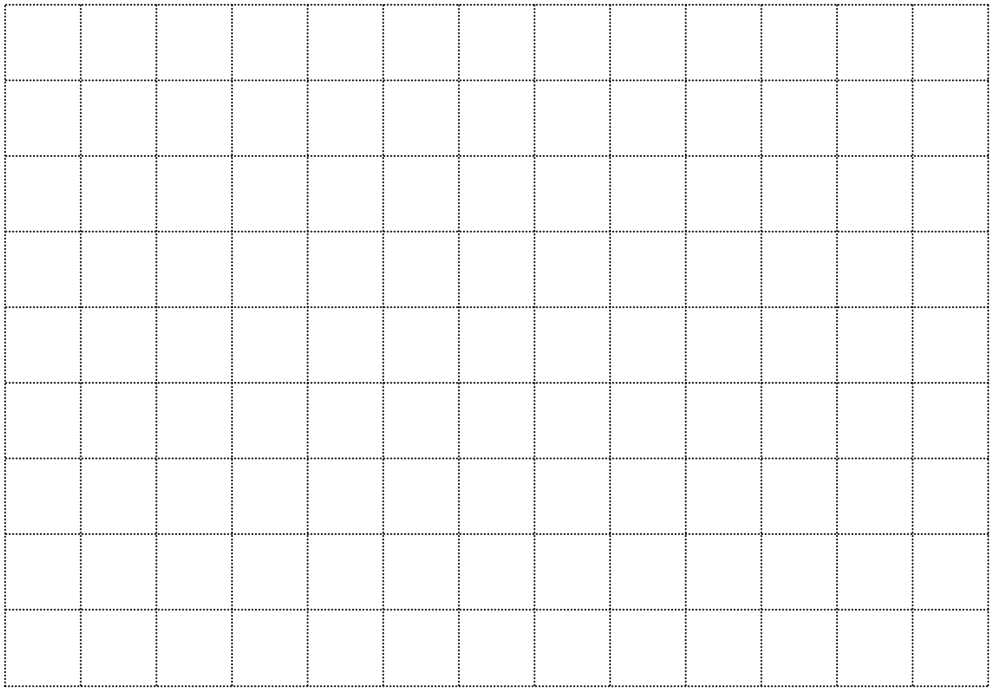
2

12



Not to scale

(a) Make an accurate scale drawing of this triangle on the grid below.
Use a scale of **1 cm to 2 cm**.



[2]

(b) Use your drawing to find

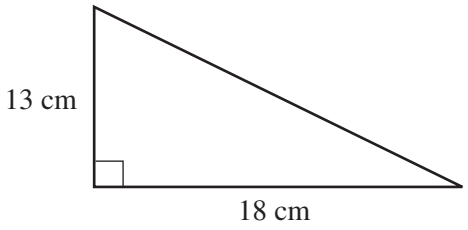
(i) the real length of side a,

(b)(i) ..... cm [2]

(ii) the size of angle x.

(ii) .....° [1]

(c) Work out the area of this triangle.



Not to scale

(c) .....[3]

8

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