

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS**  
**General Certificate of Secondary Education**

**MATHEMATICS C**  
**(Graduated Assessment)**



**1966/2335B**

**MODULE M5 – SECTION B**

Wednesday                      **29 JUNE 2005**                      Morning                      30 minutes

Candidates answer on the question paper.

Additional materials:

- Geometrical instruments
- Tracing paper (optional)
- Pie chart scale (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**

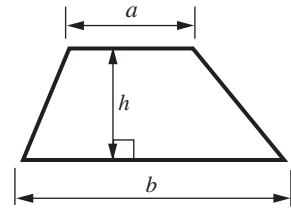
- You are expected to use a calculator in Section B of this paper.
- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this Section is 25.
- Section B starts with question 7.

<b>FOR EXAMINER'S USE</b>	
<b>Section B</b>	

**This question paper consists of 8 printed pages.**

## Formula Sheet

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



7 Bhavana tests two varieties of strawberry plants, X and Y.

(a) Here are the number of strawberries picked from each plant of variety Y.

12 12 14 15 16 17 17 18 19 21

Find the mean number of strawberries.

(a) .....[3]

(b) Bhavana produces this table.

	Mean	Range
Variety X	14.2	14
Variety Y		9

Which variety of strawberry plant would you recommend?  
Explain your answer.

Variety ..... because .....  
.....  
.....[1]

4
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8 Solve.

(a)  $2x = 15$

(a) .....[1]

(b)  $15 = 6 + x$

(b) .....[1]

(c)  $4x - 7 = 13$

(c) .....[2]

4
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9 (a) A jar contains 240 sweets.

35% of the sweets are orange.

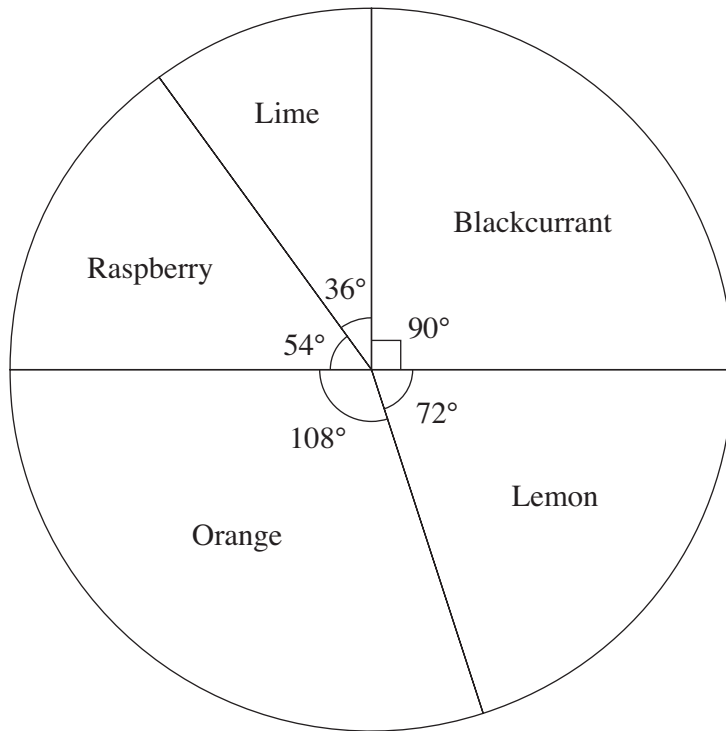
$\frac{3}{8}$  of the sweets are lemon.

The rest are blackcurrant.

How many blackcurrant sweets are in the jar?

(a) .....[5]

- (b) Teresa buys a bag of sweets.  
This pie chart shows the different sweets in her bag.



- (i) What fraction of her sweets is blackcurrant?

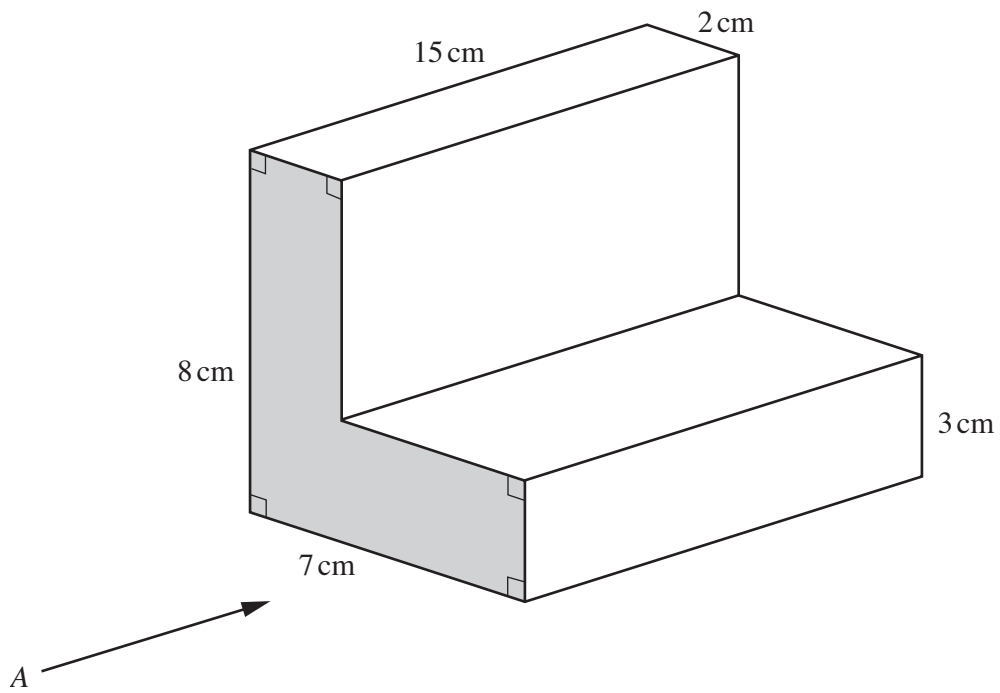
(b)(i) .....[1]

- (ii) There are 4 lime sweets in the bag.  
How many sweets are in the bag altogether?

(ii) .....[2]

8	
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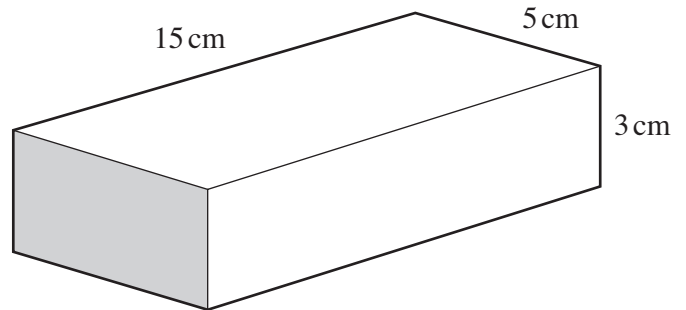
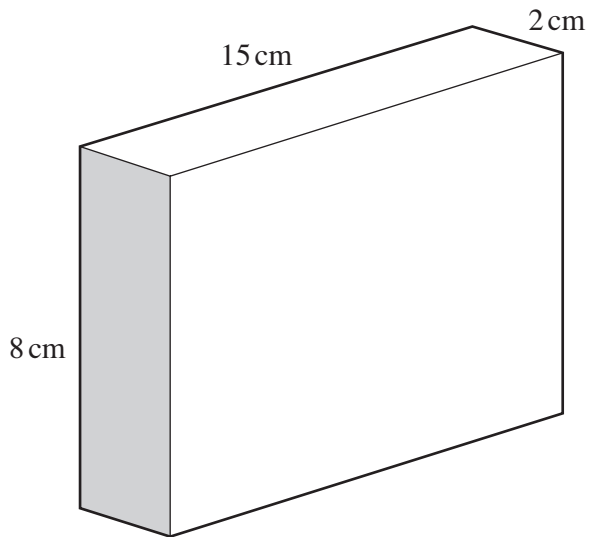
10 This diagram shows a block.



(a) On the grid draw full size the side view of the block from A.



(b) The block can be made from these two cuboids.



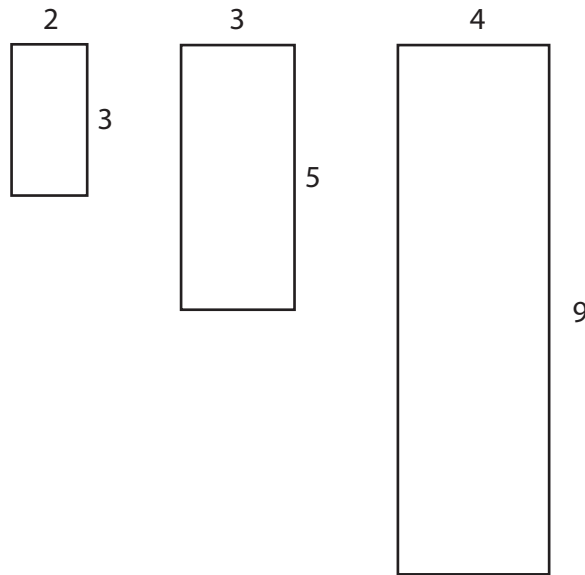
Calculate the **total** volume of the two cuboids.

(b) .....cm<sup>3</sup> [3]

5
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**TURN OVER FOR QUESTION 11**

11 James has drawn this sequence of rectangles.



(a) The widths of the first three rectangles are 2, 3 and 4.

What will be the width of the 100<sup>th</sup> rectangle?

(a) .....[1]

(b) He uses this rule for working out the heights of the rectangles.

*Multiply the previous height by 2 and subtract 1*

(i) The first three rectangles have heights of 3, 5 and 9.

Work out the height of the fifth rectangle.

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

(ii) Without working it out, explain why the height of the 8<sup>th</sup> rectangle cannot be 386.

.....  
 .....[1]

4
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