

**Oxford Cambridge and RSA Examinations**

**General Certificate of Secondary Education**

**Mathematics C (Graduated Assessment)      1966/2341A (F)**  
**FOUNDATION TIER TERMINAL PAPER – SECTION A**

**Specimen Paper 2003**

Candidates answer on the question paper

Additional materials:

Tracing paper (optional)  
 Geometrical instruments  
 Pie chart scale

**TIME** 1 hour

Candidate Name	Centre Number	Candidate Number										
	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>						<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>					

**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, in the spaces provided on the question paper.
- 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 correct working even if the answer is incorrect.

**INFORMATION FOR CANDIDATES**

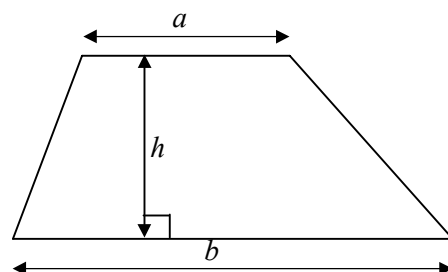
- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total mark available for this section is 50.

For Examiner's use only	
<b>Section A</b>	
<b>Section B</b>	
<b>Total</b>	

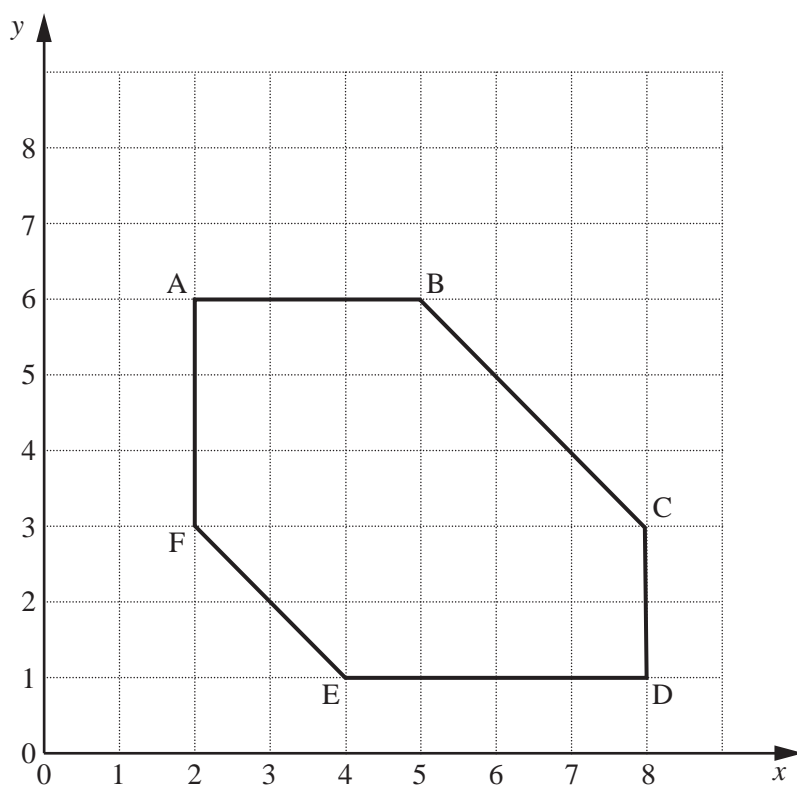
**WARNING**  
**You are not allowed to use a calculator in Section A of this paper.**

## FORMULAE SHEET: FOUNDATION TIER

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



1



(a) Write down the co-ordinates of A.

(a) (\_\_\_\_\_, \_\_\_\_\_) [1]

(b) What is the name of the shape drawn on the grid?

(b) \_\_\_\_\_ [1]

(c) Measure the length of the side BC.

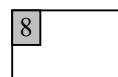
(c) \_\_\_\_\_ [2]

(d) Find the perimeter of the shape.

(d) \_\_\_\_\_ [2]

(e) Find the area of the shape.

(e) \_\_\_\_\_  $\text{cm}^2$  [2]



**2** Look at these numbers.

2      8      16      25      31      45      56

From this list, write down

**(a)** an odd number,

**(a)** \_\_\_\_\_ [1]

**(b)** a square number,

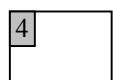
**(b)** \_\_\_\_\_ [1]

**(c)** a multiple of 5,

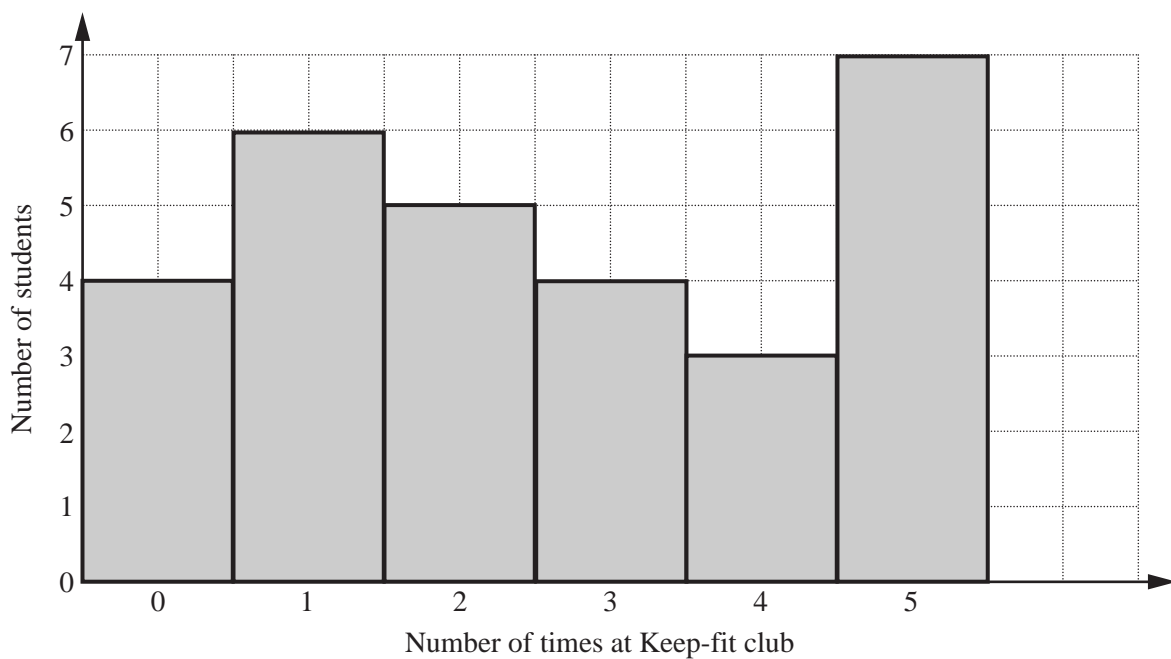
**(c)** \_\_\_\_\_ [1]

**(d)** two numbers with a difference of 15.

**(d)** \_\_\_\_\_ and \_\_\_\_\_ [1]



- 3 This bar chart shows the number of times that a group of year 11 students attended the keep-fit club in a 5 week period.



- (a) How many students went to the club 3 times?

(a) \_\_\_\_\_ [1]

- (b) How many went to the club more than 3 times?

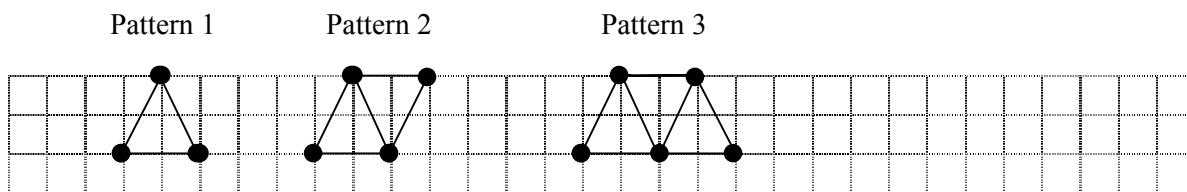
(b) \_\_\_\_\_ [1]

- (c) How many students were there in the group?

(c) \_\_\_\_\_ [2]

4
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- 4 Sally is making patterns using dots and lines.



- (a) Draw the next pattern on the grid. [1]

- (b) Complete this table. [1]

Pattern	1	2	3	4	5
Number of dots	3	4	5		
Number of lines	3	5	7		

- (c) For pattern 12, work out

- (i) the number of dots,

(c)(i) \_\_\_\_\_ [1]

- (ii) the number of lines.

(ii) \_\_\_\_\_ [1]

- (d) Explain how you worked out

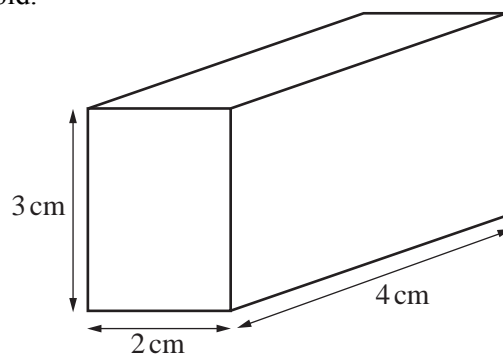
- (i) the number of dots in pattern 12,

\_\_\_\_\_  
 \_\_\_\_\_ [1]

- (ii) the number of lines in pattern 12.

\_\_\_\_\_  
 \_\_\_\_\_ [1]

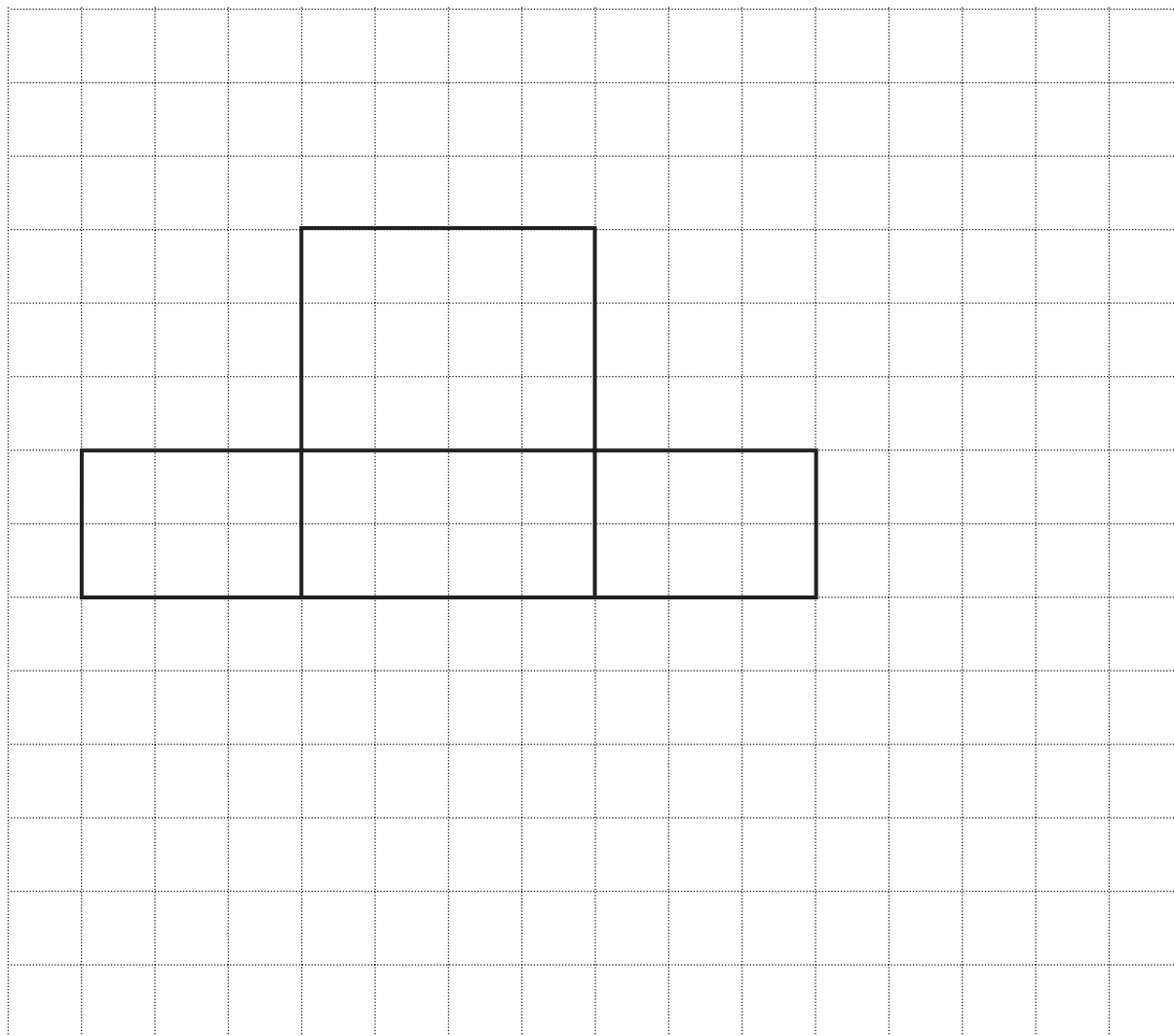
- 5 The diagram shows a cuboid.



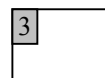
- (a) Work out the volume of the cuboid.

(a) \_\_\_\_\_  $\text{cm}^3$  [2]

- (b) Complete a full-size net of the cuboid by drawing the other two faces.



[1]



- 6** The chart shows the temperature at midnight on 5 nights in Aberdeen.

Day	Mon	Tues	Wed	Thurs	Fri
Temperature °C	-5	2	4	0	-3

- (a) (i)** Write these temperatures in order, lowest first.

\_\_\_\_\_ [1]

- (ii)** What is the difference between the highest and lowest temperatures?

**(ii)** \_\_\_\_\_ °C [1]

- (b)** On Saturday night the temperature was 4 °C higher than Friday night.

What was the temperature on Saturday night?

**(b)** \_\_\_\_\_ °C [1]

3	
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- 7** Solve these equations.

**(a)**  $2x = 12$

**(a)**  $x =$  \_\_\_\_\_ [1]

**(b)**  $4x + 1 = 13$

**(b)**  $x =$  \_\_\_\_\_ [1]

**(c)**  $5x - 2 = 3x + 9$

**(c)**  $x =$  \_\_\_\_\_ [2]

5	
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- 8 Farida is looking for a car to buy.  
The car she likes is priced at £5600.  
The hire purchase terms are

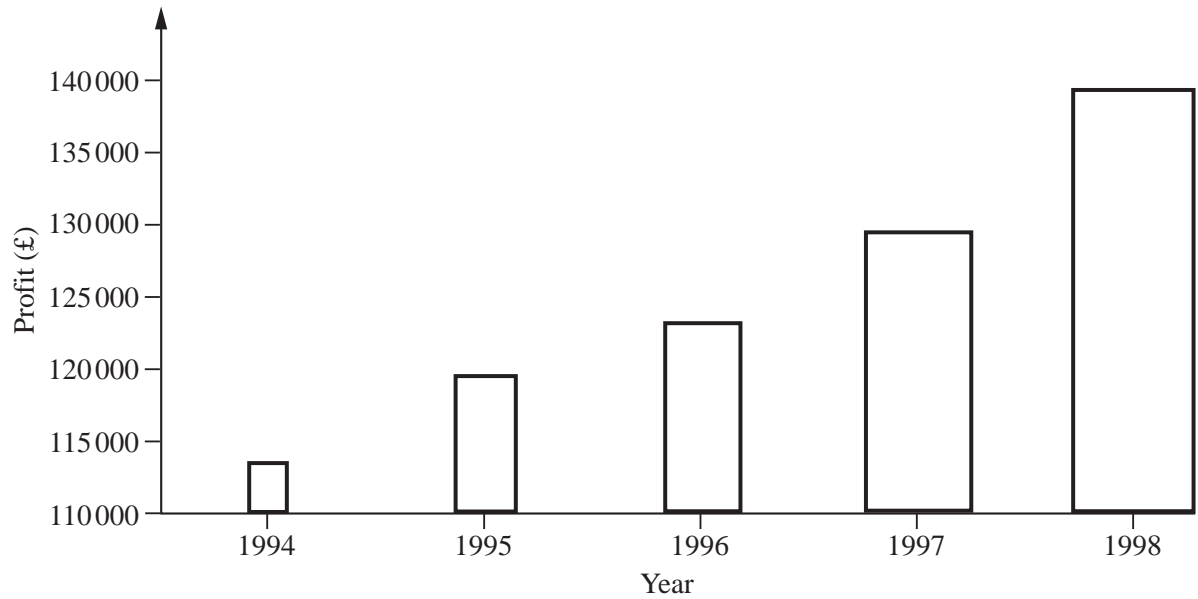
Deposit: $\frac{1}{4}$ of the purchase price
PLUS
36 monthly instalments of £175.50

Calculate how much she will pay altogether for the care on hire purchase.

£ \_\_\_\_\_ [5]

5
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- 9 For this diagram, give two reasons why it might be misleading.

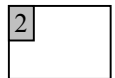


1 \_\_\_\_\_

[1]

2 \_\_\_\_\_

[1]



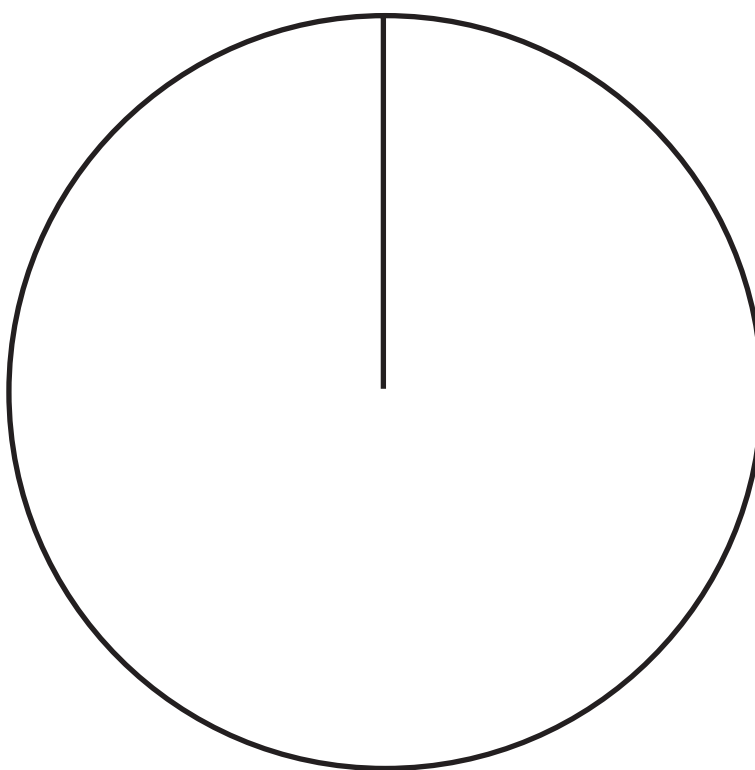
- 10 Yvonne recorded the makes of 50 cars that were parked on Edgedale Road.

These are her results.

Make of car	Number
Ford	12
Vauxhall	18
Rover	6
Toyota	5
Other	9

Draw and label a pie chart to illustrate this information.

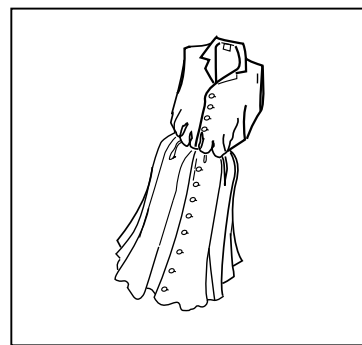
[3]



3

- 11 This dress was £200.  
It is reduced by £70.

Work out the percentage reduction.



\_\_\_\_\_ % [2]

2

- 12 (a) Mark drives 34 890 miles in a year.  
He wants to know roughly how many miles this is per week.

Write down a calculation Mark could do in his head to **estimate** how many miles he drives each week.

(a) \_\_\_\_\_ = \_\_\_\_\_ miles [3]

- (b) On Thursday Mark drives 132 km in 1 hour 30 minutes.

Calculate his average speed in kilometres per hour.

(b) \_\_\_\_\_ km/h [3]

6