



General Certificate of Secondary Education  
2011

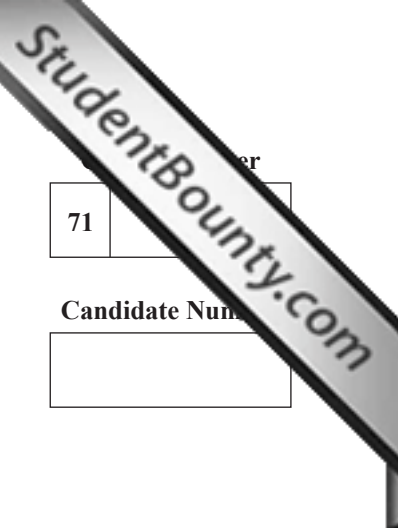
## Mathematics

Module N2 Paper 2  
(With calculator)  
Foundation Tier

[GMN22]

TUESDAY 31 MAY

10.30 am–11.15 am



71

Candidate Number

### TIME

45 minutes.

### INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this question paper.

Answer **all twelve** questions.

Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.

### INFORMATION FOR CANDIDATES

The total mark for this paper is 44.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

You should have a calculator, ruler, compasses, set-square and protractor.

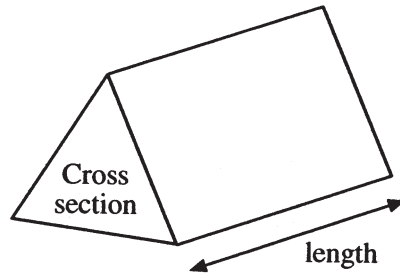
The Formula Sheet is on page 2.

For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
<b>Total Marks</b>	



# Formula Sheet

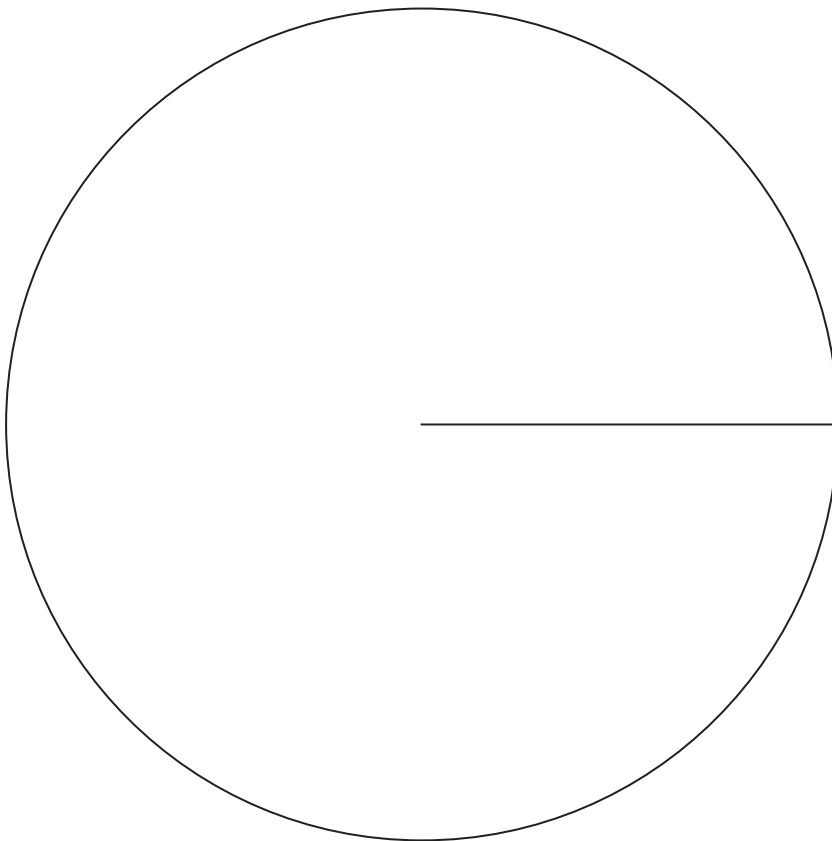
**Volume of prism** = area of cross section  $\times$  length



1 The number of buns sold in a bakery was recorded as follows.

Cream	16
Fruit	10
Jam	9
Chocolate	25

Draw a pie chart to illustrate this information.



[4]

Examiner Only	
Marks	Remark





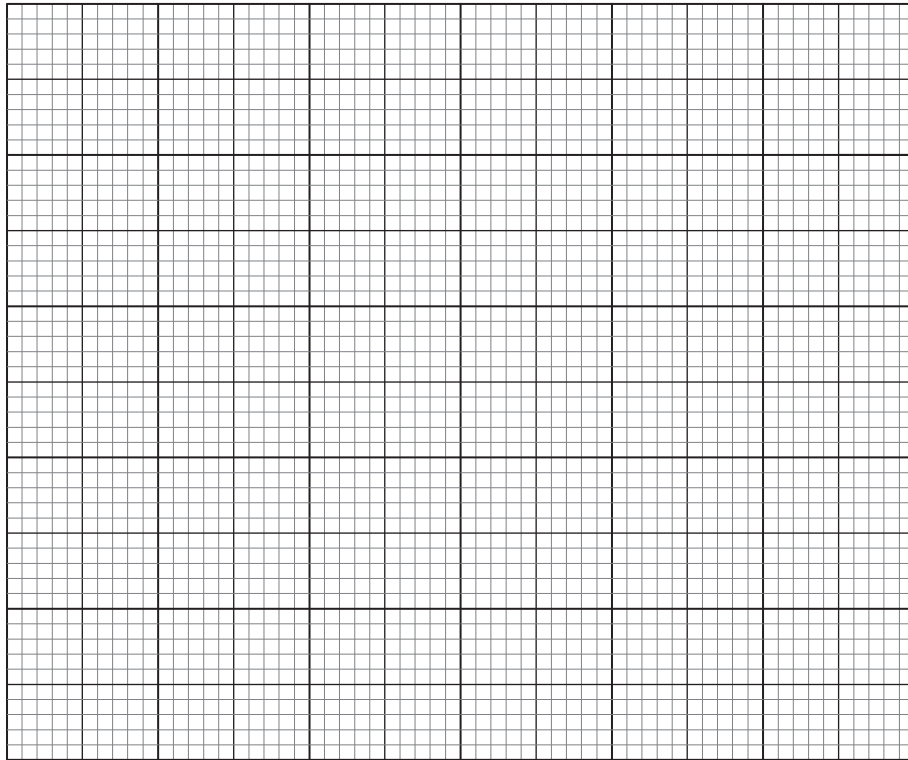


6 The increase in test scores of 100 children over a period of time was recorded.

Increase in test scores ( $w$ )	$0 < w \leq 5$	$5 < w \leq 10$	$10 < w \leq 15$	$15 < w \leq 20$	$20 < w \leq 25$
Frequency	16	36	22	14	12

Show this information on a grouped frequency diagram.

[3]



Examiner Only	
Marks	Remark







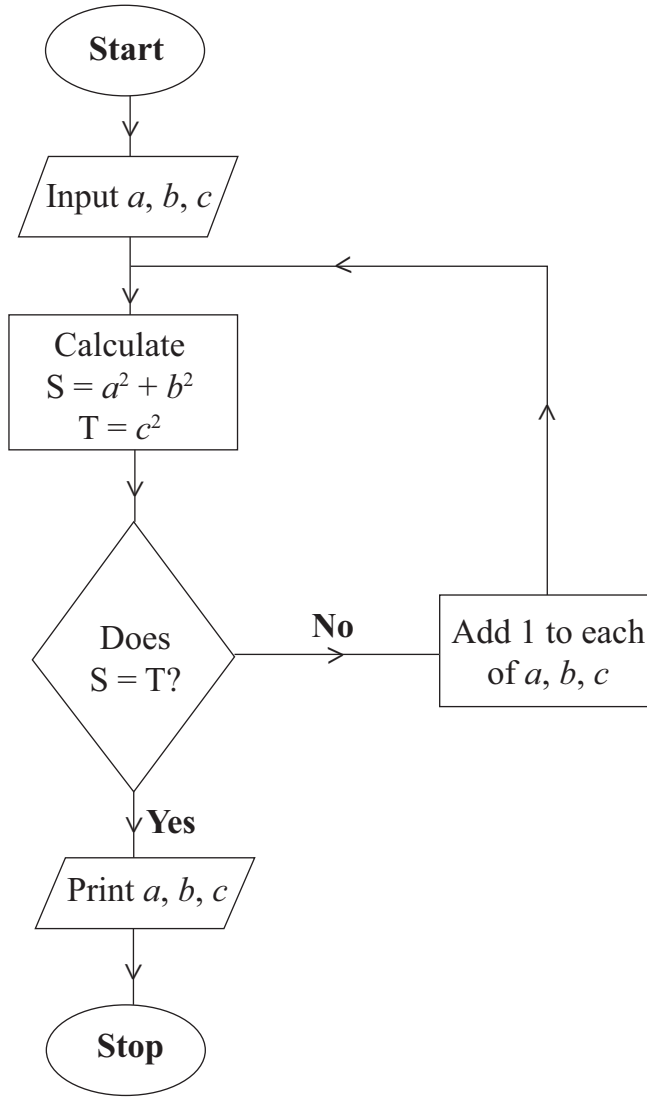
11 One solution of  $x^2 + 4x = 50$  lies between 5 and 6

Use the method of **trial and improvement** to find this solution correct to one decimal place.

**Show all your working.**

Answer  $x =$  \_\_\_\_\_ [3]

Examiner Only	
Marks	Remark



Starting with  $a = 2, b = 9, c = 10$  use the flow chart to find the values printed.

$a$	$b$	$c$	S	T
2	9	10		

Answer  $a =$  \_\_\_\_\_,  $b =$  \_\_\_\_\_,  $c =$  \_\_\_\_\_ [3]

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**THIS IS THE END OF THE QUESTION PAPER**

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Examiner Only	
Marks	Remark

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