



Rewarding Learning

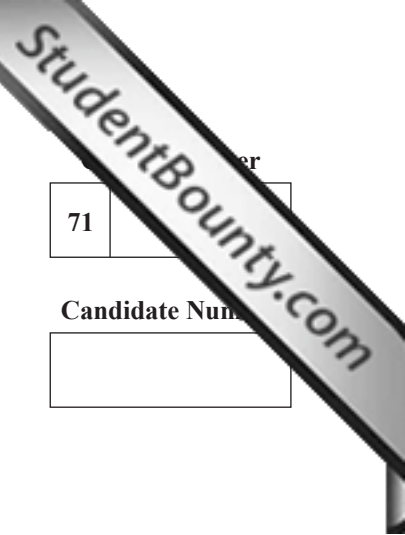
General Certificate of Secondary Education  
January 2012

## Mathematics

Module N1 Paper 2  
(With calculator)  
Foundation Tier

[GMN12]

WEDNESDAY 11 JANUARY  
10.30 am – 11.15 am



71	
Candidate Number	
<input type="text"/>	

### 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.

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

<b>Total Marks</b>	
--------------------	--



1 Write down the next term of the sequence

25, 19, 13, 7, .....

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

2 Tim Jackson visited a shop called "Music Mania."



He bought 3 CDs at £7.99 each and 2 DVDs at £8.50 each.

(a) Calculate his total bill.

Answer £ \_\_\_\_\_ [2]

(b) Tim paid by cheque.

Complete the cheque below.

 <b>STAR Bank</b> Town Square, Leyland Branch 1 Town Square, Leyland, Lancashire, PR4 0WN		25-08-92
Pay		Date <u>04/01/12</u>
Amount	A/C Payee	£ <input type="text"/>
 Bank plc 10JUL00		<u>Tim Jackson</u> Mr Tim Jackson
Cheque No. 000121	Branch No. 29110892	Account No. 0403392
		Trans. Code 01

[2]

Examiner Only	
Marks	Remark

3 Thirteen students had the following number of books in their bags.

3, 8, 4, 3, 6, 5, 9, 3, 7, 4, 3, 5, 6

(a) What is the median number of books?

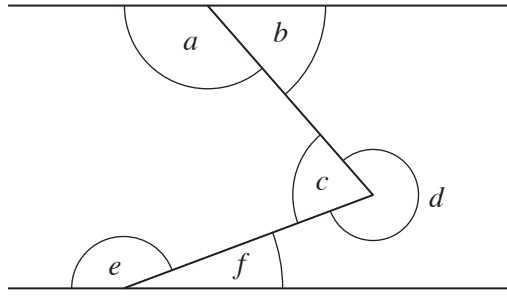
Answer \_\_\_\_\_ books [2]

(b) What is the mode of the number of books?

Answer \_\_\_\_\_ books [1]

Examiner Only	
Marks	Remark

4 (a)



From the diagram, write down a letter for an angle which is

(i) acute, Answer \_\_\_\_\_ [1]

(ii) obtuse, Answer \_\_\_\_\_ [1]

(iii) reflex. Answer \_\_\_\_\_ [1]

(b) (i) Using the point marked “C” as the centre, draw a circle with a radius of 3.5 cm.

C .

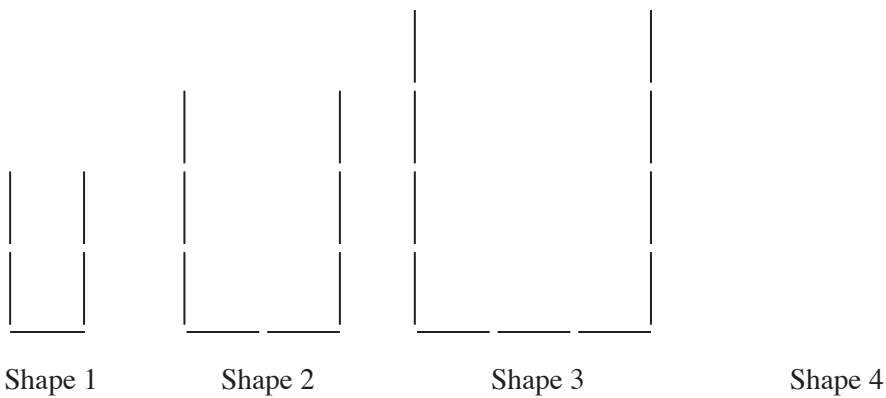
[1]

(ii) Draw a diameter on this circle. [1]

(iii) Draw any chord parallel to your diameter. [1]

Examiner Only	
Marks	Remark

5 Some “U” shapes drawn below are made with matches.



(a) Draw Shape 4. [1]

Shape Number	1	2	3	4	5
Number of Matches	5	8	11		

(b) Complete the table for Shapes 4 and 5. [1]

(c) What pattern do you notice in the “Number of Matches” row?

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

(d) Find the number of matches in Shape 10.

Answer \_\_\_\_\_ [2]

Examiner Only	
Marks	Remark

6 (a) There are 10 students on a school bus.

Their ages in years are 12, 15, 13, 17, 10, 14, 16, 15, 16, 11

What is the mean age of the 10 students?

Answer \_\_\_\_\_ years [3]

(b)

Ayr						
90	Carlisle					
73	96	Edinburgh				
132	196	144	Fort William			
33	96	44	160	Glasgow		
94	136	45	105	61	Perth	
51	101	124	184	84	144	Stranraer

(i) John travels from Carlisle to Perth. What distance does he travel?

Answer \_\_\_\_\_ miles [1]

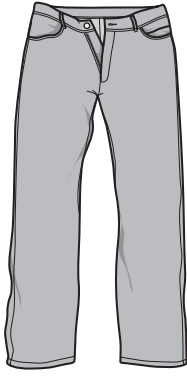
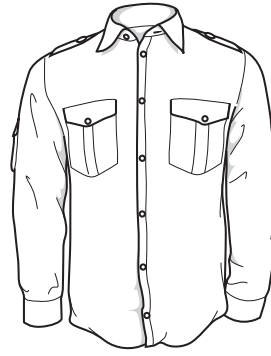
(ii) Mark travels from Carlisle to Glasgow and then on to Perth.

How many more miles does Mark travel than John?

Answer \_\_\_\_\_ miles [2]

Examiner Only	
Marks	Remark

7

JEANS –  $\frac{1}{3}$  OFF TAG PRICE

SHIRTS – 15% OFF TAG PRICE

Jim buys jeans and a shirt in the sale.  
 The price tag on the jeans is £54.  
 The price tag on the shirt is £28.  
 What is the total cost of his items in the sale?

Answer £ \_\_\_\_\_ [4]

- 8 The shoe sizes for 18 pupils in a class are recorded in the frequency table below.

<b>Shoe size</b>	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	7	$7\frac{1}{2}$	8	$8\frac{1}{2}$	9
<b>Number of pupils</b>	1	0	5	4	4	2	1	0	1	0

- (a) Write down the modal shoe size.

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

- (b) Work out the range of these pupils' shoe sizes.

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

Examiner Only

Marks Remark

9 Each student in Year 10 studies one language (French, Spanish or German).

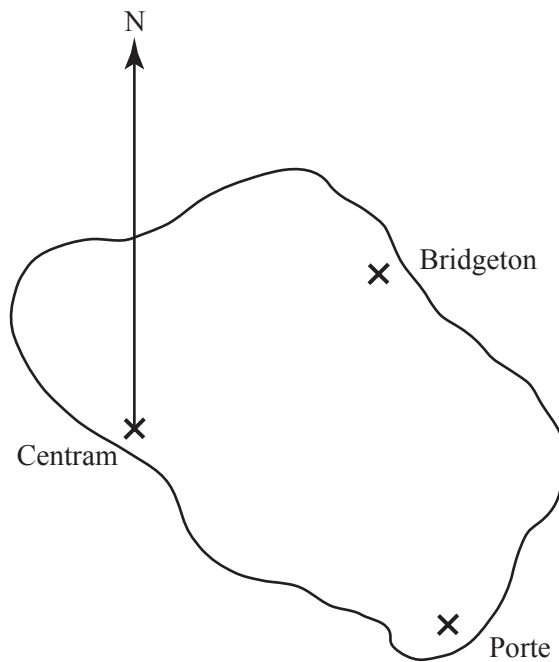
There are 135 students in Year 10.

Two-fifths study French, one-third study Spanish and the rest study German.

How many students study German?

Answer \_\_\_\_\_ [4]

10



(a) Write down the bearing of Bridgeton from Centram.

Answer \_\_\_\_\_ ° [1]

(b) Write down the bearing of Porte from Centram.

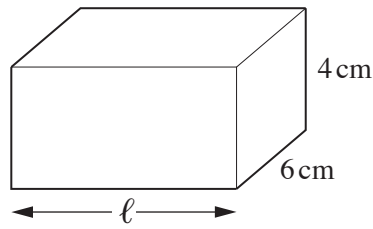
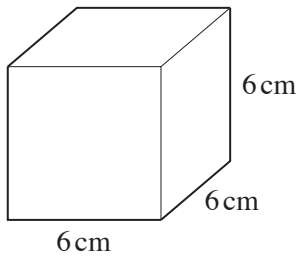
Answer \_\_\_\_\_ ° [1]

Examiner Only	
Marks	Remark



11 The volumes of this cube and this cuboid are the same.

What is the missing length marked  $\ell$  on the cuboid?



Answer \_\_\_\_\_ [3]

12 (a) Calculate

$$\frac{1}{2.5^2}$$

Give your answer as a **decimal**.

Answer \_\_\_\_\_ [2]

(b) Which of the following fractions is nearest in size to  $\frac{3}{5}$ ?

**Show your working.**

$$\frac{7}{10} \quad \frac{11}{20} \quad \frac{17}{30} \quad \frac{1}{2}$$

Answer \_\_\_\_\_ [2]

---

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

---

Examiner Only	
Marks	Remark

--	--





Permission to reproduce all copyright material has been applied for.  
In some cases, efforts to contact copyright holders may have been unsuccessful and CCEA  
will be happy to rectify any omissions of acknowledgement in future if notified.