



General Certificate of Secondary Education
January 2011

Centre Number

71

Candidate Number

Mathematics

Module N1 Paper 2
(With calculator)
Foundation Tier

[GMN12]

TUESDAY 11 JANUARY
10.30 am – 11.15 am



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 thirteen** 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	
13	

Total
Marks



- 1 Below is part of a customer's gas bill. Complete it to find the number of units of gas used and the total cost.

Present reading	66908 units
Previous reading	65112 units
Number of units used	_____
Price per unit	16.5p
Total cost for units	£ _____

[4]

Examiner Only	
Marks	Remark

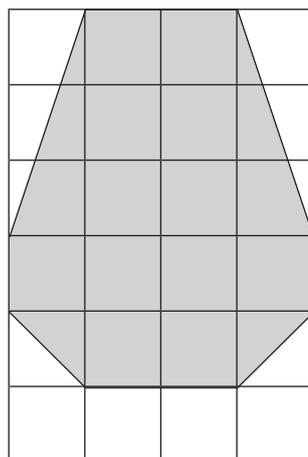
- 2 (a) What metric unit is used for measuring

(i) the capacity of a bottle of perfume, Answer _____ [1]

(ii) the weight of a calculator? Answer _____ [1]

- (b) The shaded shape is drawn on a 1 cm grid.

Work out the area of the shaded shape.



Answer _____ cm² [2]

3 Forty pupils were asked to write down an odd number less than 10

Here are the results

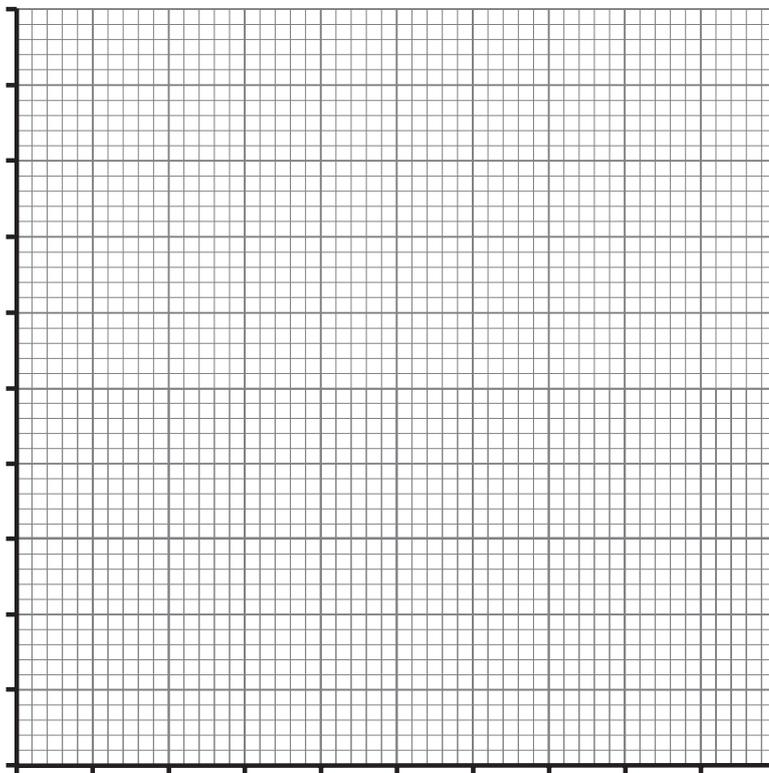
1 5 9 3 1 7 9 5 5 5
 3 3 9 7 7 7 5 1 3 7
 9 5 1 1 3 7 9 5 3 9
 3 3 7 7 1 1 9 3 5 7

(a) Complete the following frequency table.

Odd Number	Tally (if required)	Frequency
1		
3		
5		
7		
9		

[2]

(b) Draw a clearly labelled bar chart to show this information on the grid below.



[3]

Examiner Only	
Marks	Remark

- 6 (a) The display on a fridge/freezer shows the temperature in each compartment as follows

FRIDGE: 5°C	-18°C: FREEZER
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- (i) How much colder is the freezer than the fridge?

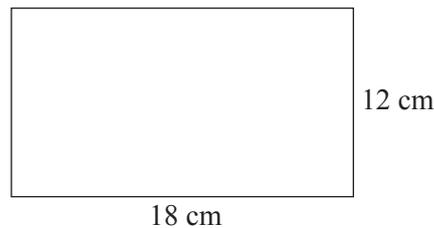
Answer _____ °C [1]

- (ii) The door of the freezer was not closed properly and as a result the temperature in the freezer rose by 5°C.

What temperature should now be showing on the display for the freezer?

Answer _____ °C [1]

(b)



Linda has 80 one-centimetre square tiles. She places all of them on an 18 cm by 12 cm tray to form a rectangle.

This can be done in two different ways to produce two different-sized rectangles.

For each one state the length and breadth of the rectangle.

length = _____ cm, breadth = _____ cm [1]

length = _____ cm, breadth = _____ cm [1]

Examiner Only	
Marks	Remark

- 9 (a) A teacher has 16 boxes of sweets.

Each box contains 25 sweets.

The teacher shares as many sweets as possible equally among 23 pupils.

- (i) How many sweets does each pupil receive?

Answer _____ sweets [1]

- (ii) How many sweets are left over?

Answer _____ sweets [1]

- (b)

<p>VANZ-TO-GO</p> <p>Van hire charges</p> <p>£52 per day</p> <p>plus</p> <p>19p per mile</p>
--

Bob hires a van for two days.

When he returns it the total hire charge is £137.06

How many miles did he drive it for?

Answer _____ miles [3]

Examiner Only	
Marks	Remark

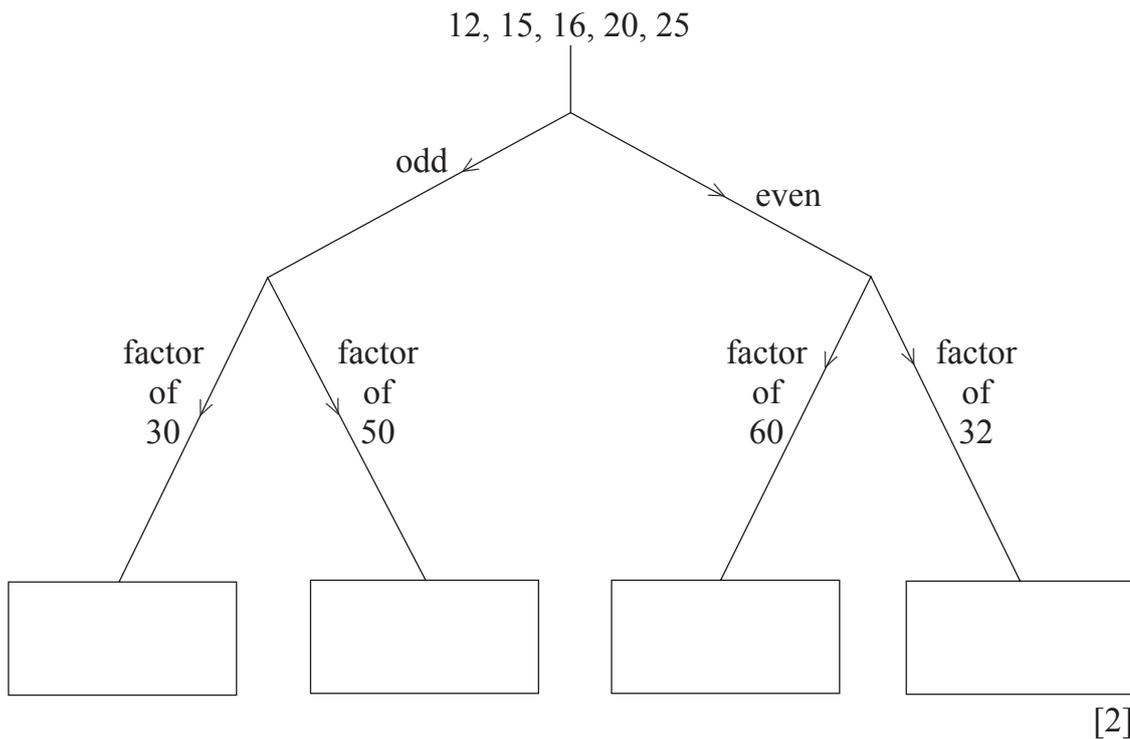
10 Simplify $10 - 3a + 2 - 5a$

Examiner Only

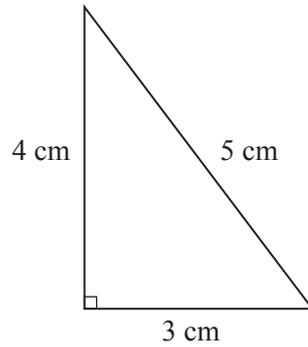
Marks Remark

Answer _____ [2]

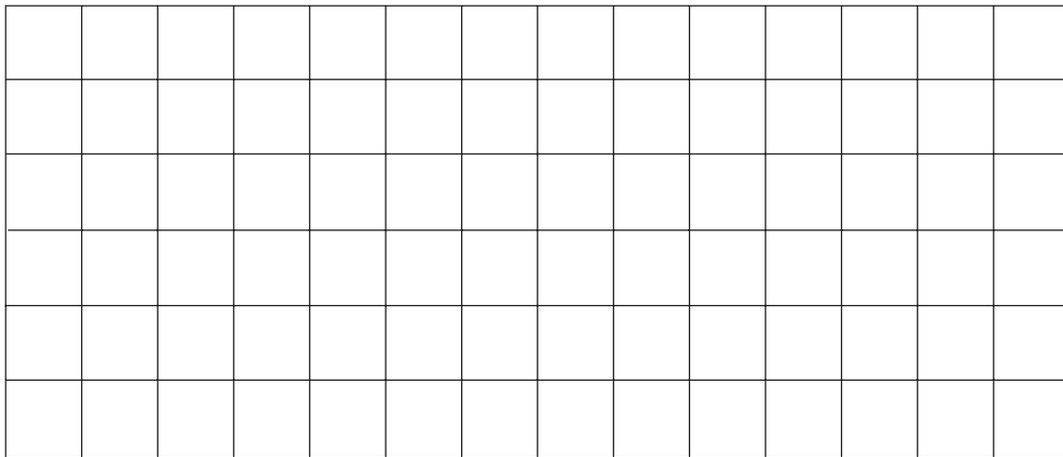
11 Using the decision tree, sort these numbers into the correct boxes.



- 12 (a) A right-angled triangle has sides of 3 cm, 4 cm and 5 cm.



On the grid below show how two of these triangles can be put together to make a parallelogram.



[2]

- (b) Calculate angle t in the triangle below.

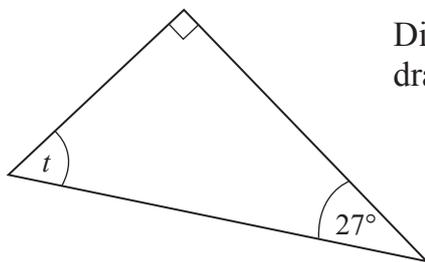


Diagram not drawn accurately.

Answer _____ ° [2]

Examiner Only	
Marks	Remark

13 The stem and leaf diagram shows a list of temperatures.

2	2	3	6	8	9	
3	0	2	4	5	6	7
4	1	1				

Key 4 | 1 = 41 °C

Write down

(a) the range,

Answer _____ °C [1]

(b) the median.

Answer _____ °C [1]

THIS IS THE END OF THE QUESTION PAPER

Examiner Only	
Marks	Remark

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