



Rewarding Learning

General Certificate of Secondary Education
2010

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Candidate Number

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StudentBounty.com

Mathematics

Module N5 Paper 2
(With calculator)
Foundation Tier



GMN52

[GMN52]

MONDAY 7 JUNE

2.45 pm – 3.45 pm

TIME

1 hour.

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. Complete in blue or black ink. Pencil may be used in diagrams only.

Do not write with a gel pen.

Do not use correction fluid to correct errors in your answers.

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 56.

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	
13	

Total Marks	
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Examiner Number

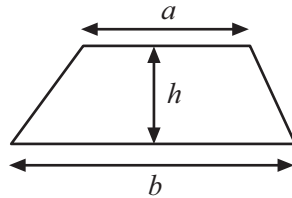
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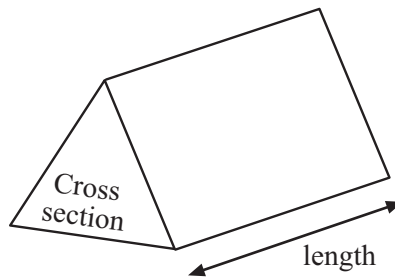
JUN 1 0 GMN 52

Formula Sheet

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



$$\text{Volume of prism} = \text{area of cross section} \times \text{length}$$



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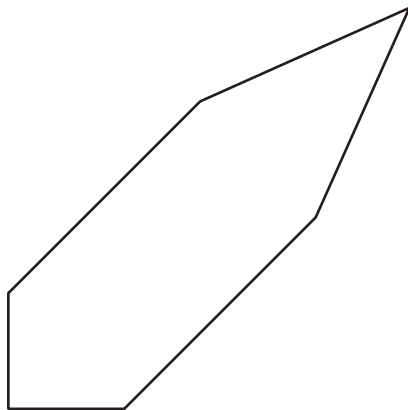
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03

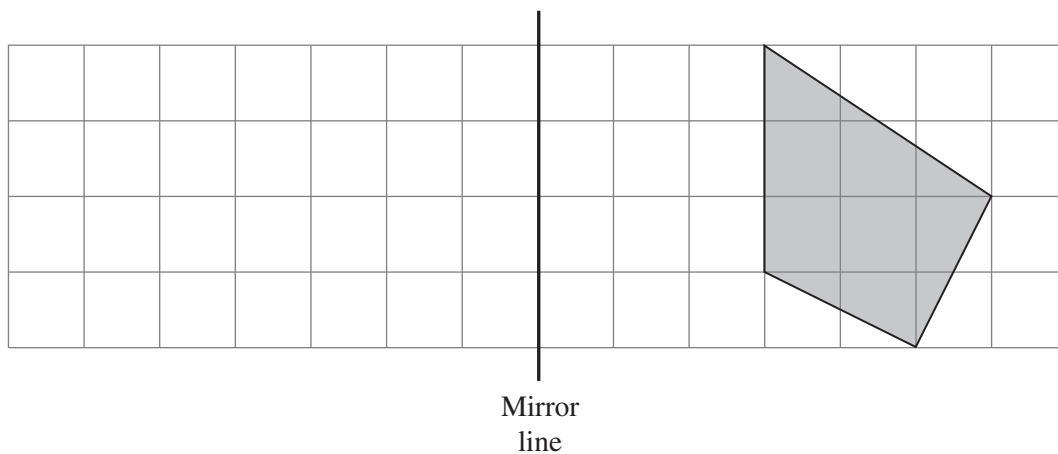
Question 1

(a) Draw the line of symmetry on the shape below.



[1]

(b) Reflect the shape below in the mirror line.

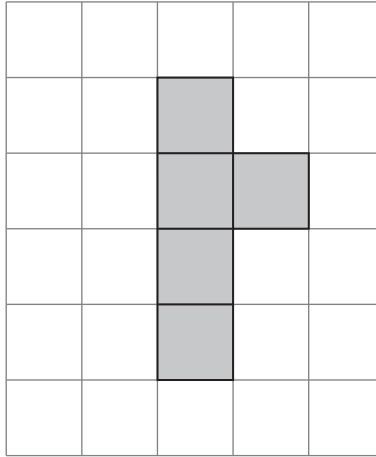


[2]

Examiner Only**Marks** **Remark**

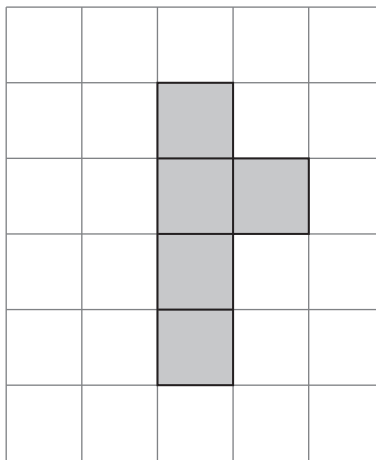
Question 1 continued

- (c) (i) Shade one square to give this shape line symmetry.



[1]

- (ii) Shade one square (in a different position to (i)) to give this shape line symmetry.

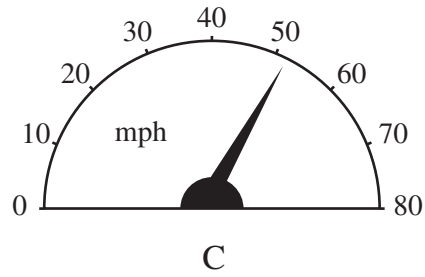
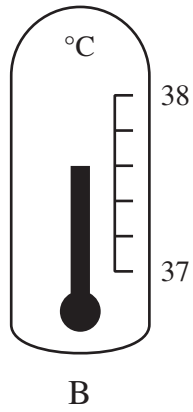
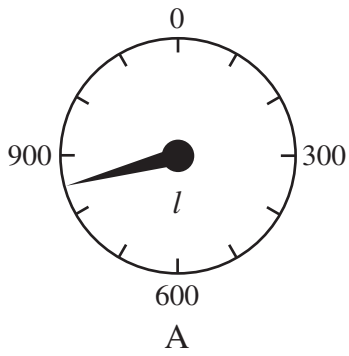


[1]

Examiner Only	
Marks	Remark



Question 2



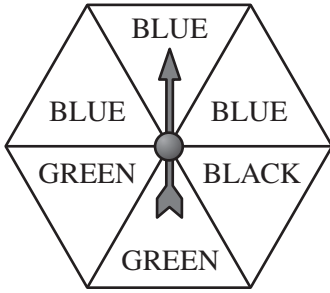
Match each scale to the correct statement.
Give the reading on the scale.

- (a) the speed of a car Scale _____ Reading _____ [2]
- (b) the amount of oil in a tank Scale _____ Reading _____ [2]
- (c) the temperature of a patient Scale _____ Reading _____ [2]

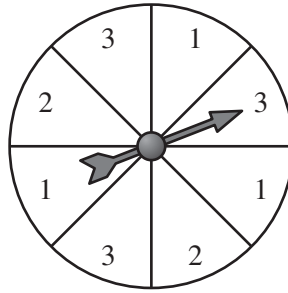
Examiner Only	
Marks	Remark



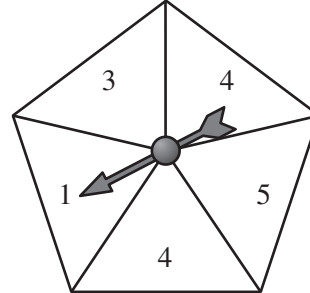
Question 3



Spinner 1



Spinner 2



Spinner 3

Each spinner shown has equal sized sectors.
Complete the following:

- (a) In Spinner 1, the colour least likely to occur is _____ . [1]
- (b) In Spinner 2, the probability of getting _____ or _____ is the same. [1]
- (c) In Spinner 3, the probability of getting a _____ is greater than getting any of the other numbers. [1]

Examiner Only

Marks Remark



Question 4

A watch costs £54.80

Jenny can buy it on mail order for 52 weekly payments of £1.30

How much extra would this cost?

Examiner Only**Marks****Remark**

Answer £ _____ [3]

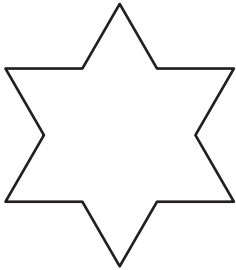
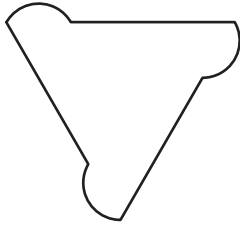

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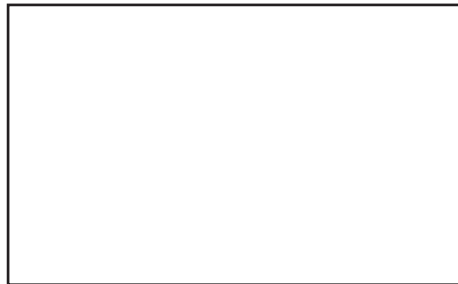
Question 5

(a) Complete the table.

Shape			
Number of lines of symmetry			
Order of rotational symmetry			

[6]

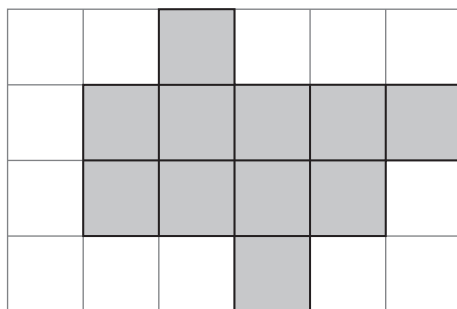
(b) The diagram shown is a rectangle.



Draw all the lines of symmetry on the rectangle.

[2]

(c) Shade one square to give the shape below rotational symmetry of order 2



[1]

Examiner Only

Marks Remark



Question 6

Circle either Possible or Impossible for each of the following statements.

(a) The probability that John will fail his French test is $\frac{6}{5}$

Possible Impossible [1]

(b) The probability that a battery will last less than 10 hours is 0.65

Possible Impossible [1]

(c) The probability that it will rain in the summer is -0.65

Possible Impossible [1]

Examiner Only**Marks** **Remark**

Question 7

The total cost of a TV is given by the formula

$$\text{Total cost} = \text{deposit} + \text{monthly payment} \times 6$$

- (a) Ann pays a deposit of £250 and her monthly payment is £50
Find the total cost of her TV.

Answer £ _____ [2]

- (b) Mark pays no deposit and his monthly payment is £80
What is the total cost of Mark's TV?

Answer £ _____ [1]

- (c) In your own words, explain what the 6 in the formula stands for.

Answer _____ [1]

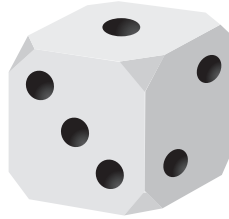
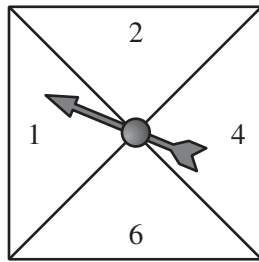
- (d) The total cost of David's TV is £800 and his deposit is £380
Work out David's monthly payment.

Answer £ _____ [3]

Examiner Only	
Marks	Remark



Question 8



The spinner is spun and the dice is thrown.

(a) Complete this table of outcomes.

		Spinner			
		1	2	4	6
Dice	1				
	2				
	3				
	4				
	5				
	6				

[2]

(b) What is the probability that the score on the dice is greater than the score on the spinner?

Answer _____ [2]

Examiner Only	
Marks	Remark



Question 9

- (a) Joe converts €47 500 to £ when the exchange rate is £1 = €1.25
How many £ should he receive?

Answer £ _____ [2]

- (b) Julie earns £42 000 per year. Her tax free allowance is £5000
She pays 22% of the remaining salary in tax.
How much of her salary is left after tax has been deducted?

Answer £ _____ [3]

Examiner Only**Marks Remark**

Question 10

Which of 'always even', 'always odd', 'could be odd or even' describes the number $5(2n + 3)$? (n is an integer).

Explain your answer.

Answer _____

because _____

_____ [2]

Examiner Only**Marks****Remark**

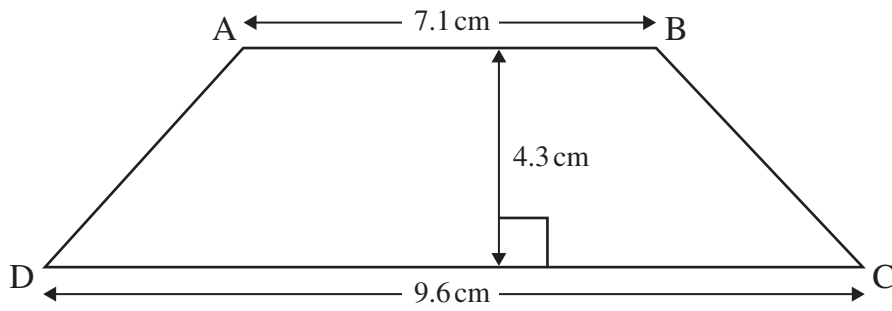
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Question 11

ABCD is a trapezium.
Calculate the area of ABCD.



Give your answer to an appropriate degree of accuracy.

Answer _____ cm^2 [3]

Examiner Only	
Marks	Remark



Question 12

Maurice travels 99 km.

His journey is split between train and taxi in the ratio 11 : 4

How far does he travel by taxi?

Answer _____ km [2]

Examiner Only	
Marks	Remark

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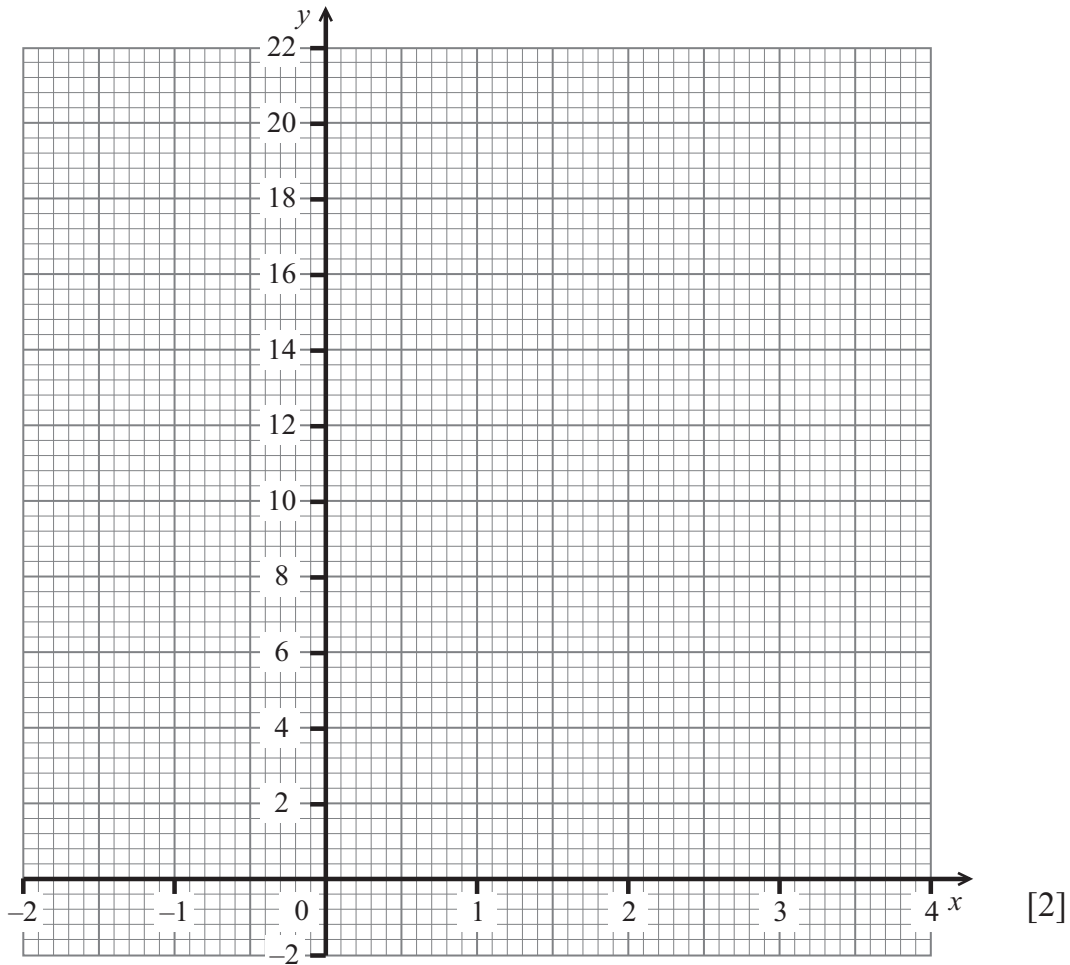


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Question 13**(a)** Complete the table for $y = 2x^2 - 5x + 3$

x	-2	-1	0	1	2	3	4
y		10	3	0	1		15

[2]

(b) Draw the graph of $y = 2x^2 - 5x + 3$ for $x = -2$ to $x = 4$ on the axes below.

[2]

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THIS IS THE END OF THE QUESTION PAPER

Examiner Only	
Marks	Remark





