



Rewarding Learning

General Certificate of Secondary Education
January 2014

--	--	--	--	--

Candidate Number

--	--	--	--

Mathematics

Unit T5 Paper 2
(With calculator)
Foundation Tier



[GMT52]

WEDNESDAY 15 JANUARY 10.45am–11.45am

ML

TIME

1 hour, plus your additional time allowance.

INSTRUCTIONS TO CANDIDATES

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

You must answer the questions in the spaces provided.

Complete in blue or black ink only.

Answer **all thirteen** questions.

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

You **may** use a calculator for this paper.

INFORMATION FOR CANDIDATES

The total mark for this paper is 50.

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

Functional Elements will be assessed in this paper.

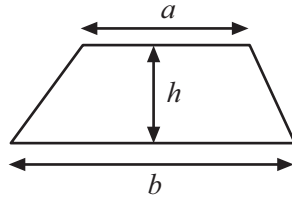
Quality of written communication will be assessed in **questions 2 and 3**.

You should have a calculator, ruler, compasses and a protractor.

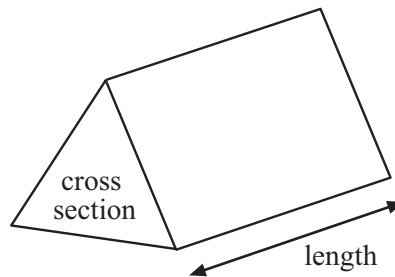
The Formula Sheet is on page 2.

Formula Sheet

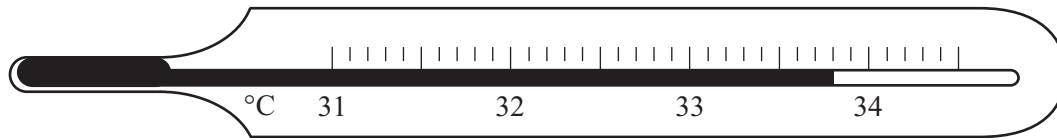
$$\text{Area of trapezium} = \frac{1}{2} (a + b)h$$



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

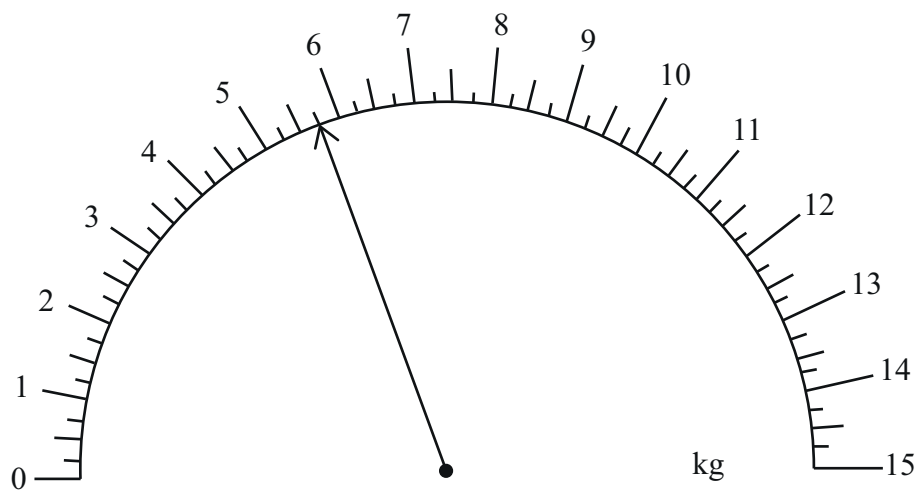


1 (a) Write down the temperature shown on the thermometer.



Answer _____ °C [1]

(b) (i) Write down the weight shown by the arrow below.



Answer _____ kg [1]

(ii) An extra 3.5 kg is added.

Draw an arrow on the scale above to show the **total** weight now. [2]

Examiner Only

Marks Remark

Total Question 1

[Turn over

- 4 Every car salesperson with NewAutos earns a basic monthly salary of £1800.
In addition they earn a bonus of £75 for every car that they sell in the month.

$$\text{Total monthly salary} = \text{£1800} + \text{Number of cars sold} \times \text{Bonus per car sold}$$

- (a) Eileen is a car salesperson with NewAutos.
She sold 15 cars in April.
Work out her total monthly salary for April.

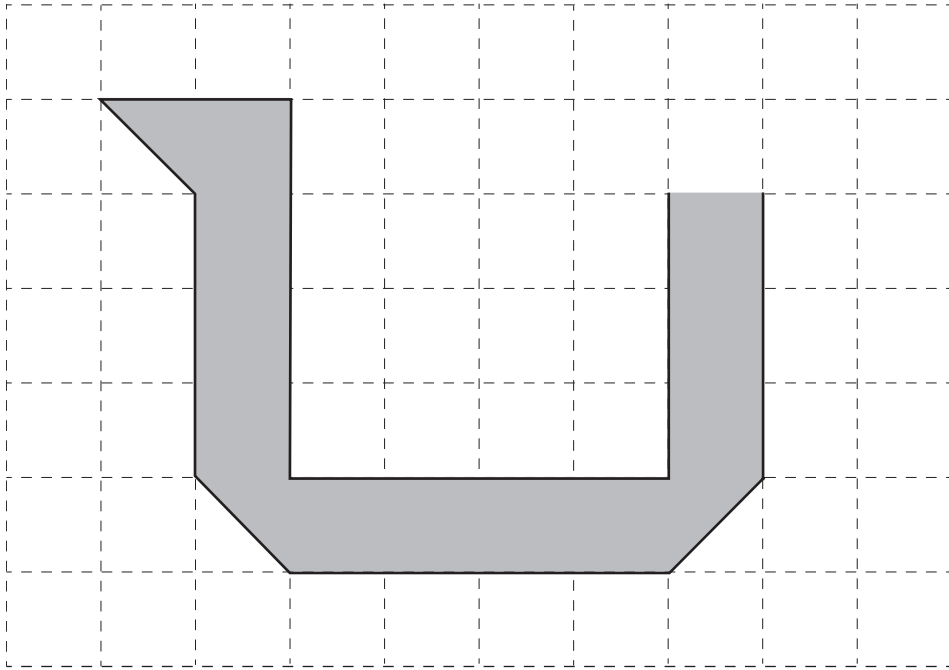
Answer £ _____ [2]

- (b) Jim is another car salesperson with NewAutos.
In May his total monthly salary was £3525
Work out how many cars Jim sold in May.

Answer _____ cars [2]

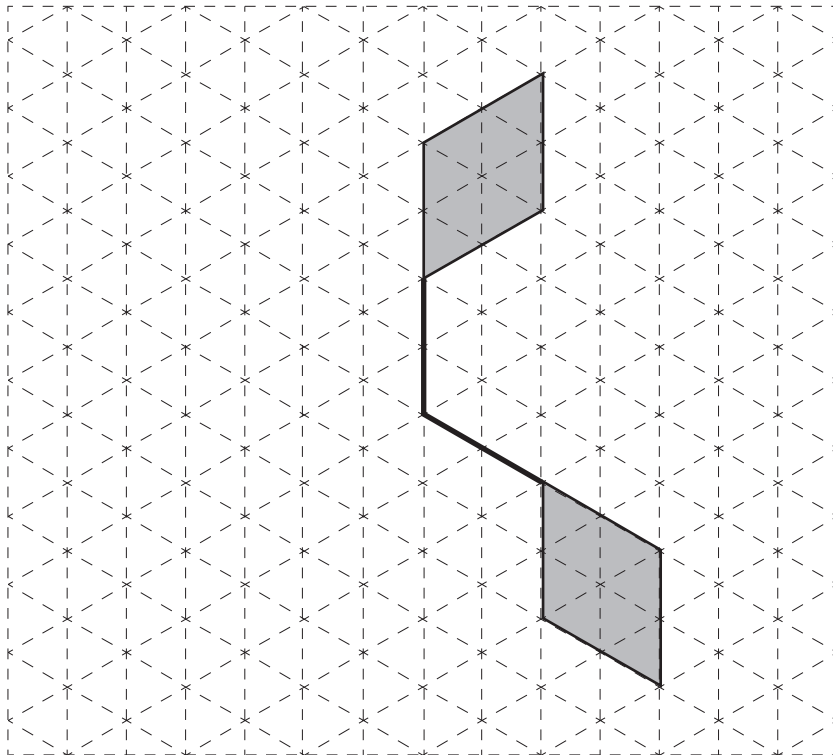
Examiner Only	
Marks	Remark
Total Question 4	

- 5 (a) Shade one square and one triangle in the diagram below so that the complete shaded shape has one line of symmetry.



[2]

- (b) Complete the shape **below** so that the completed shape has rotational symmetry of order 3.



[2]

Examiner Only

Marks	Remark
Total Question 5	

[Turn over

6 Mary has 63 square tiles and she wants to arrange them all to make a rectangle.

Write down the length and width of two **different** rectangles that she could make.

Answer 1st rectangle length _____ , width _____ [1]

2nd rectangle length _____ , width _____ [1]

Examiner Only	
Marks	Remark
Total Question 6	

7 700 people arrive at a bus station and have to be taken to a local airport.

The airport buses can carry a maximum of 48 passengers.

(a) How many buses are filled?

Answer _____ buses [1]

(b) Calculate the number of people who have to travel in the last bus to make sure all 700 people get to the airport.

Answer _____ people [1]

Total Question 7	

- 8 John was cycling at an average speed of 25 mph.
Convert this speed to km/h.

Examiner Only

Marks	Remark
Total Question 8	

Answer _____ km/h [2]

Total Question 8

- 9 There is a box with packets of crisps of different flavours.
A packet of crisps is taken at random from the box.
Some of the probabilities of taking each flavour are shown in the table below.

Flavour	Cheese	Vinegar	Bacon	Sausage	Beef
Probability	0.3	0.12		0.25	0.05

- (a) Calculate the probability that the crisps are Bacon flavour.

Answer _____ [2]

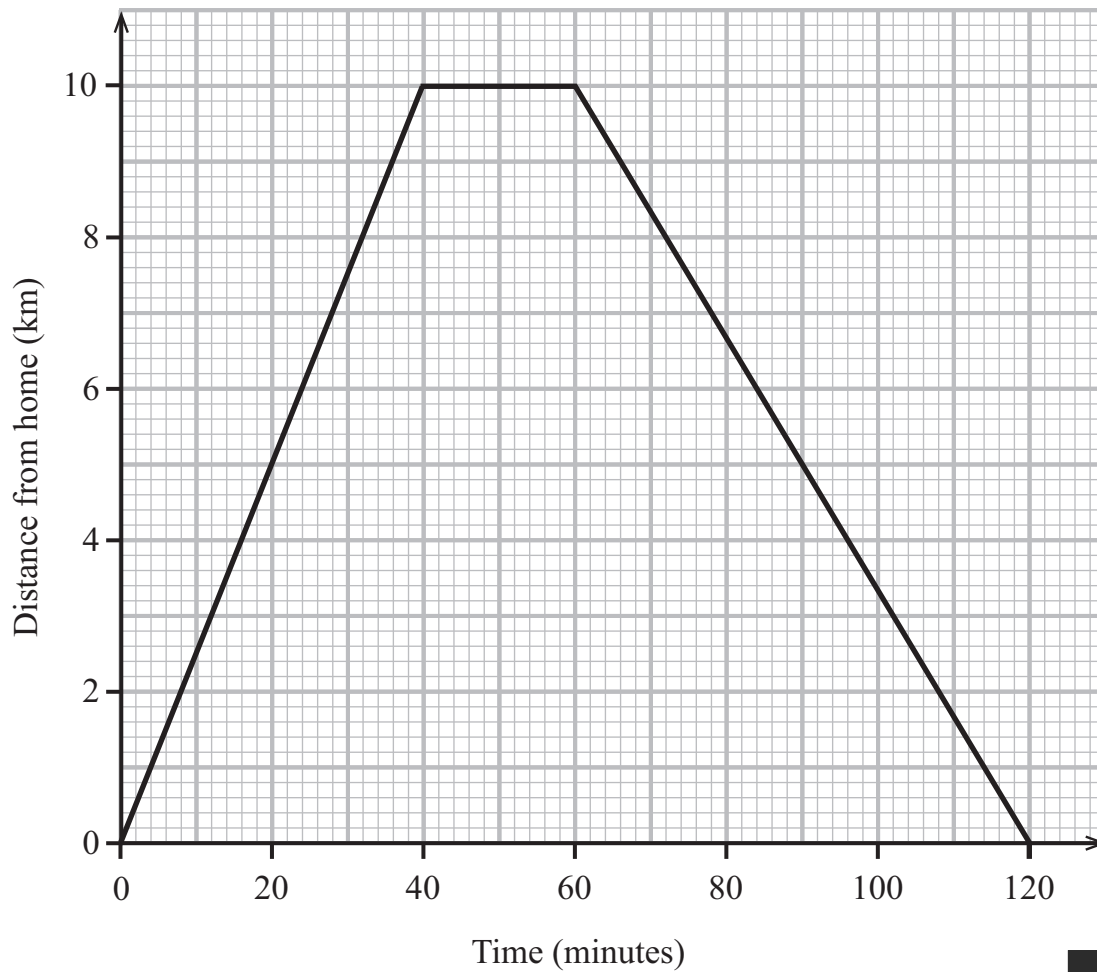
- (b) Calculate the probability that the crisps are **not** Vinegar flavour.

Answer _____ [1]

Total Question 9

[Turn over

- 10 Katie went on a cycling trip from her home.
The diagram below shows the distance/time graph for her complete journey.



- (a) What is the meaning of the horizontal line on the graph?

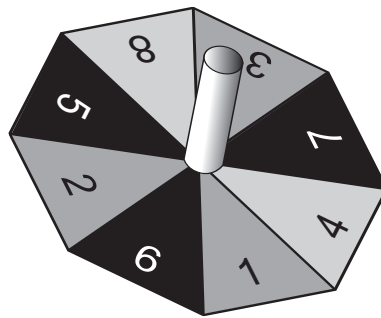
Answer _____ [1]

- (b) How far did Katie travel in the first 30 minutes?

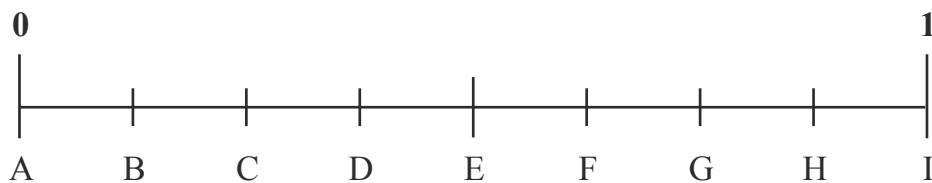
Answer _____ km [1]

Examiner Only	
Marks	Remark

11 This spinner is a regular octagon.



- (a) The spinner is spun once.
Below is a probability scale.



From the scale **write down the letter** that represents

- (i) the probability of the spinner landing on the number 10

Answer _____ [1]

- (ii) the probability of the spinner landing on an even number

Answer _____ [1]

- (iii) the probability of the spinner landing on the number 3

Answer _____ [1]

- (iv) the probability of the spinner landing on a multiple of 4

Answer _____ [1]

Examiner Only	
Marks	Remark

(b) The spinner is spun 60 times. How many times do you think it would land on a number greater than 2?

Answer _____ [2]

Examiner Only	
Marks	Remark
Total Question 11	
Total Question 12	

12 Divide £292 in the ratio 1 : 3 : 4

Answer _____ , _____ , _____ [3]



THIS IS THE END OF THE QUESTION PAPER

8695.04 ML

DO NOT WRITE ON THIS PAGE

For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

Total Marks	
--------------------	--

Examiner Number

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.

8695.04 ML