

**GENERAL CERTIFICATE OF SECONDARY EDUCATION  
MATHEMATICS C (GRADUATED ASSESSMENT)  
MODULE M2 – SECTION A**

**B272A**

Candidates answer on the question paper

**OCR Supplied Materials:**

None

**Other Materials Required:**

- Geometrical instruments
- Tracing paper (optional)

**Monday 9 March 2009**

**Morning**

**Duration: 30 minutes**



Candidate  
Forename

Candidate  
Surname

Centre Number

Candidate Number

**INSTRUCTIONS TO CANDIDATES**

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- Show your working. Marks may be given for a correct method even if the answer is incorrect.
- Answer **all** the questions.
- Do **not** write in the bar codes.
- Write your answer to each question in the space provided, however additional paper may be used if necessary.

**INFORMATION FOR CANDIDATES**

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this Section is **25**.
- This document consists of **8** pages. Any blank pages are indicated.

**WARNING**

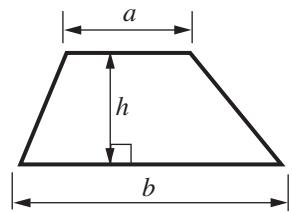


No calculator can be  
used for Section A of  
this paper

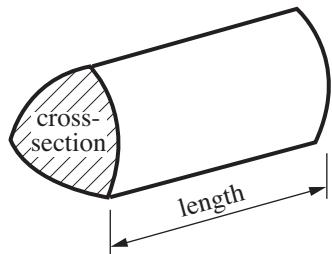
<b>FOR EXAMINER'S USE</b>	
<b>SECTION A</b>	
<b>SECTION B</b>	
<b>TOTAL</b>	

**Formulae Sheet**

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



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



**PLEASE DO NOT WRITE ON THIS PAGE**

1 (a) Work out.

$$72 \div 9$$

(a) ..... [1]

- (b) Pencils are sold in boxes of 12.  
Mrs Wright buys 7 boxes of pencils.

How many pencils does she buy?

(b) ..... [2]

2 (a) Write 50% as a fraction.

(a) ..... [1]

- (b) A pair of boots usually costs £184.  
In a sale 50% is taken off the cost.

Work out 50% of £184.

(b) £ ..... [2]

- 3 This table shows the distances, in miles, between some places in France.

	Paris	St Hilaire	Saumur	Marennes	Biarritz
Calais	180	422	340	499	671
Dieppe	112	325	243	373	545
Le Havre	115	294	206	338	531
Caen	139	245	181	313	500
St Malo	245	158	174	237	444

(a) (i) How many miles is it from Dieppe to Saumur?

(a)(i) ..... [1]

(ii) Which town is 245 miles from Caen?

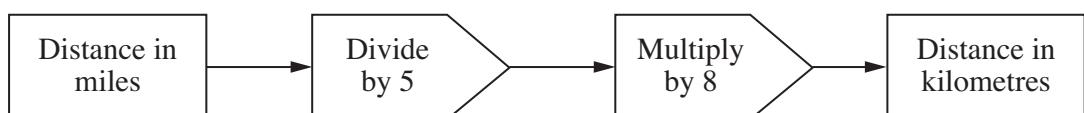
(ii) ..... [1]

(iii) Pierre travels from Le Havre to Marennes, then from Marennes to St Malo.

How many miles does he travel altogether?

(iii) ..... [3]

(b) In France the road signs are in kilometres.  
This number machine changes miles into kilometres.

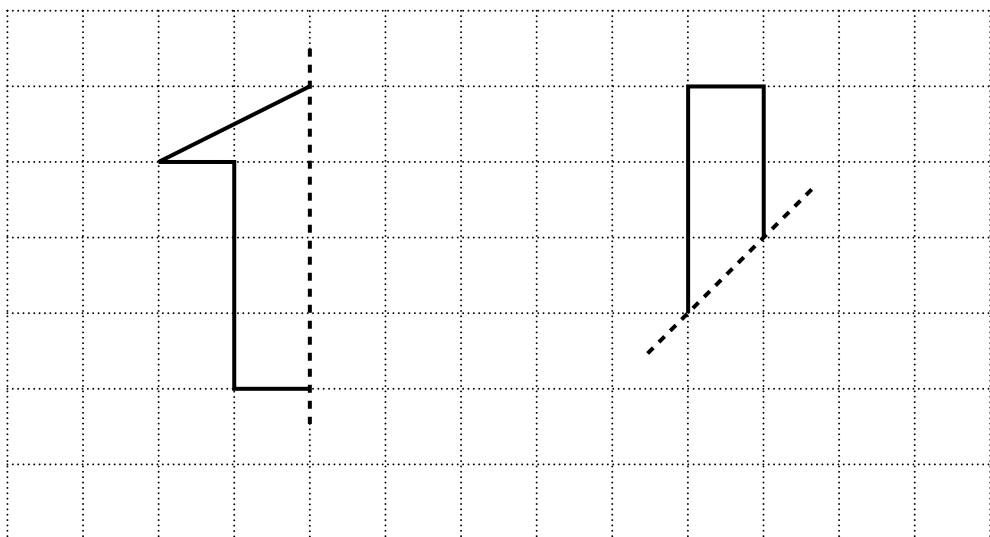


The distance between Caen and Biarritz is 500 miles.

Use the number machine to change this distance into kilometres.

(b) ..... km [2]

- 4 Complete each shape so that the dashed line is a line of reflection symmetry.



[2]

- 5 (a) Write  $\frac{1}{5}$  as a decimal.

(a) ..... [1]

- (b) Write 0.75 as a fraction.

(b) ..... [1]

- (c) Work out £2.76 – £0.85.

(c) £ ..... [2]

- 6 This formula tells you the time, in minutes, needed to cook a chicken.

Multiply the weight in  
kilograms by 40.

Then add 30.

Use the formula to work out the time needed to cook a chicken which weighs 3 kilograms.

..... minutes [2]

- 7 (a) Maria buys 6 chocolate bars costing 72p each.  
She pays with a £5 note.

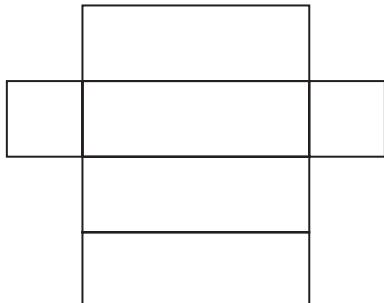
How much change should Maria get?

(a) ..... p [2]

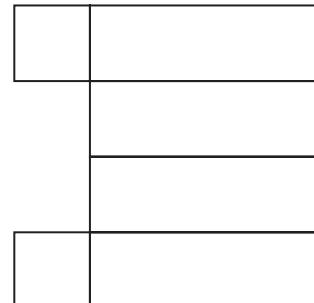
- (b) The chocolate bars are sold in boxes which are cuboids.

Which **two** of the following are nets of cuboids?

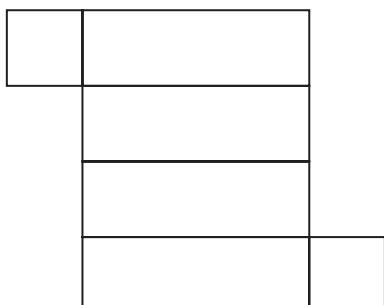
P



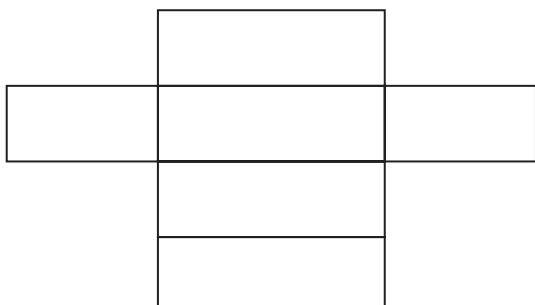
Q



R



S



(b) ..... and ..... [2]

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