

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
General Certificate of Secondary Education

MATHEMATICS B (MEI)
PAPER 1 SECTION B
FOUNDATION TIER

1968/2311B

Monday **5 JUNE 2006** Afternoon 45 minutes

Candidates answer on the question paper.

Additional materials:

- Electronic calculator
- Geometrical instruments
- Tracing paper (optional)

Candidate Name	Centre Number	Candidate Number												
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> </tr> </table>							<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> </tr> </table>						

TIME 45 minutes

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and candidate number in the boxes above.
- Answer **all** the questions.
- Write your answers, in blue or black ink, in the spaces provided on the question paper.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Show all your working. Marks may be given for working which shows that you know how to solve the problem, even if you get the answer wrong.

INFORMATION FOR CANDIDATES

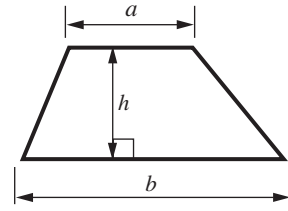
- The number of marks is given in brackets [] at the end of each question or part question.
- Unless otherwise instructed in the question, take π to be 3.142 or use the π button on your calculator.
- The total number of marks for this section is 36.
- Section B starts with question 10.

FOR EXAMINER'S USE	
Section B	

This question paper consists of 9 printed pages and 3 blank pages.

Formula Sheet: Foundation Tier

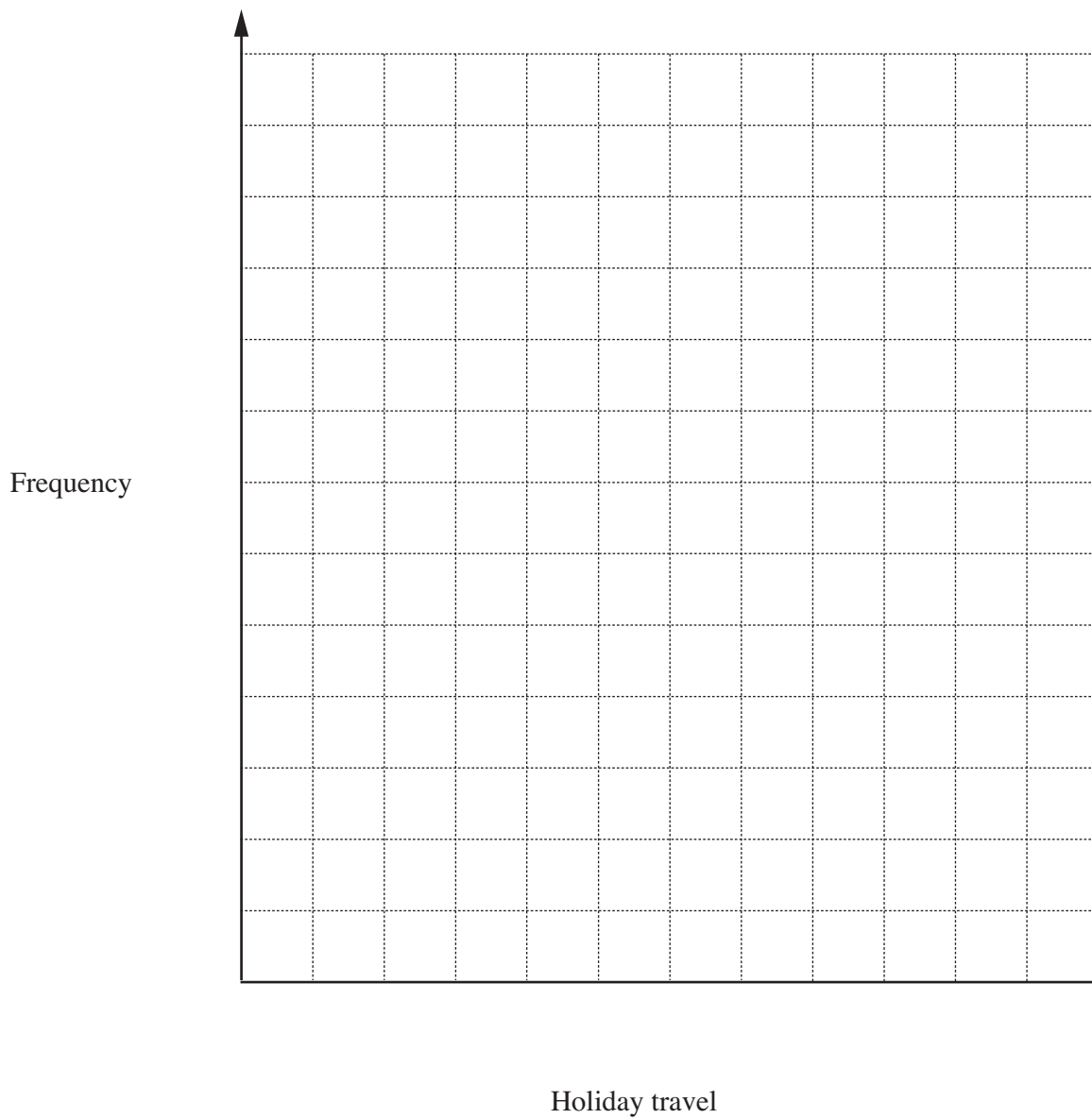
Area of trapezium = $\frac{1}{2} (a + b)h$



- 10 Marty asked 30 people how they travelled to go on holiday. His results are shown in this table.

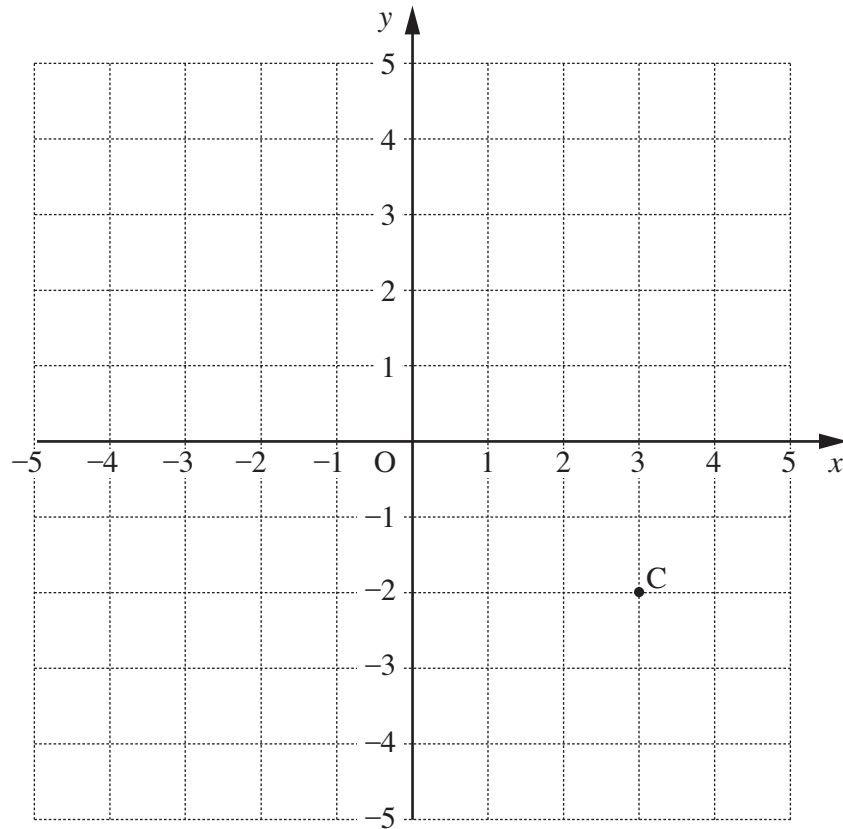
Holiday travel	Frequency
Car	9
Train	6
Aeroplane	12
Coach	3

Draw a bar chart to illustrate his results.



[3]

11 (a) Plot and label the points A (3, 4) and B (-1, 2).



[2]

(b) Write down the coordinates of point C.

(b) C (..... ,)[1]

12 Write down the **metric** unit that would be most appropriate to measure these.

The distance from London to Paris,

.....[1]

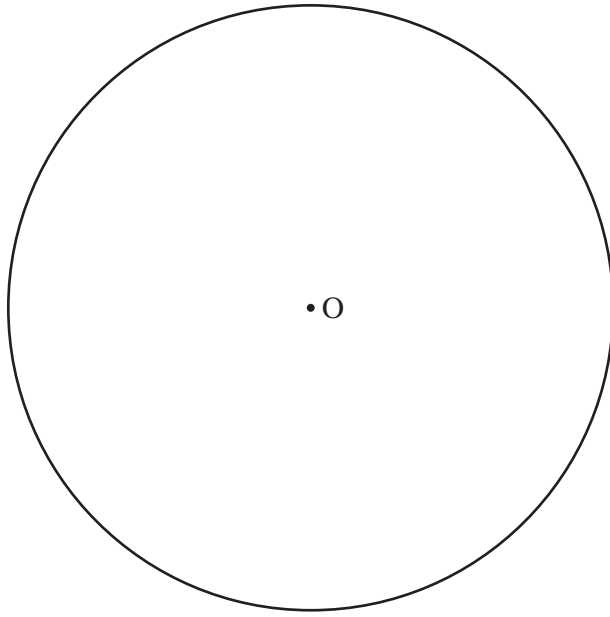
The weight of a bag of potatoes,

.....[1]

The amount of milk in a carton.

.....[1]

13 (a) Measure the length of the diameter of this circle.



(a)cm [1]

(b) Calculate the area of a circle with radius 6 cm.

(b)cm² [2]

- 14 Which two of these fractions are **not** equivalent to $\frac{1}{5}$?

$\frac{2}{10}$	$\frac{7}{35}$	$\frac{6}{25}$	$\frac{8}{40}$	$\frac{11}{15}$
----------------	----------------	----------------	----------------	-----------------

..... and[2]

- 15 Tanita goes clay pigeon shooting.
The total cost, in pounds, of a clay pigeon shoot is calculated using this formula.

Total cost(£) = $25.50 + 0.17 \times$ number of clay pigeons used

Tanita uses 75 clay pigeons.

Calculate the total cost.

£[3]

16 N is an **odd** number.

Choose one of these to complete each sentence.

EVEN ODD EVEN OR ODD

(a) $N + 2$ is [1]

(b) $2N$ is [1]

(c) N^2 is [1]

17 Mia recorded the numbers of words on 12 pages of a children's reading book.

12 17 20 14 11 9 23 13 9 31 8 25

Calculate

(a) the range,

(a)[1]

(b) the mean.

(b)[3]

- 18 (a) Cereal bars are packed in boxes of 36.
John wants 2500 bars.

How many boxes does he need to buy?

(a)[3]

- (b) Individual boxes for breakfast cereals measure 7.5 cm by 3 cm by 10 cm.
They are packed into cartons measuring 60 cm by 60 cm by 30 cm.

How many boxes can be packed into a carton?

(b)[3]

19 Judith travelled from Brussels to London on the train.

- (a) Her ticket cost €157.
The exchange rate was £1 = €1.43.

Change €157 into pounds.

(a) £[3]

- (b) The distance from Brussels to London is 330 km.
The train took 110 minutes.

Calculate the average speed of the train.
Give your answer in kilometres per hour.

(b)km/h [3]

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (OCR) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

OCR is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.