

Centre Number						Candidate Number				
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Other Names										
Candidate Signature										



Free-Standing Mathematics Qualification
Foundation Level

Using Data

4983

Specimen Question Paper

For Examiner's Use	
Examiner's Initials	
Question	Mark
1	
2	
3	
4	
5	
6	
7	
TOTAL	

For this paper you must have:

- a clean copy of the Data Sheet (enclosed)
- a protractor
- a ruler
- a calculator.

Time allowed

- 1 hour

Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page.
- Do all rough work in this book. Cross through any work that you do not want to be marked.
- You may **not** refer to the copy of the Data Sheet that was available prior to this examination. A clean copy is enclosed for your use.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 40.
- You are expected to use a calculator where appropriate.

Advice

- In all calculations, show clearly how you work out your answer.

Section A

Answer **all** questions in the spaces provided.

Use **Primary school class size** on page 2 of the Data Sheet.

1 The class sizes were:
24, 20, 26, 30, 22, 24, 27, 28, 21, 33, 26 and 24.

Use these data to find:

1 (a) the greatest class size;
.....
(1 mark)

1 (b) the smallest class size;
.....
(1 mark)

1 (c) the range in the class size;
.....
.....
(2 marks)

1 (d) the median class size;
.....
.....
.....
(3 marks)

1 (e) the mean class size;
.....
.....
(3 marks)

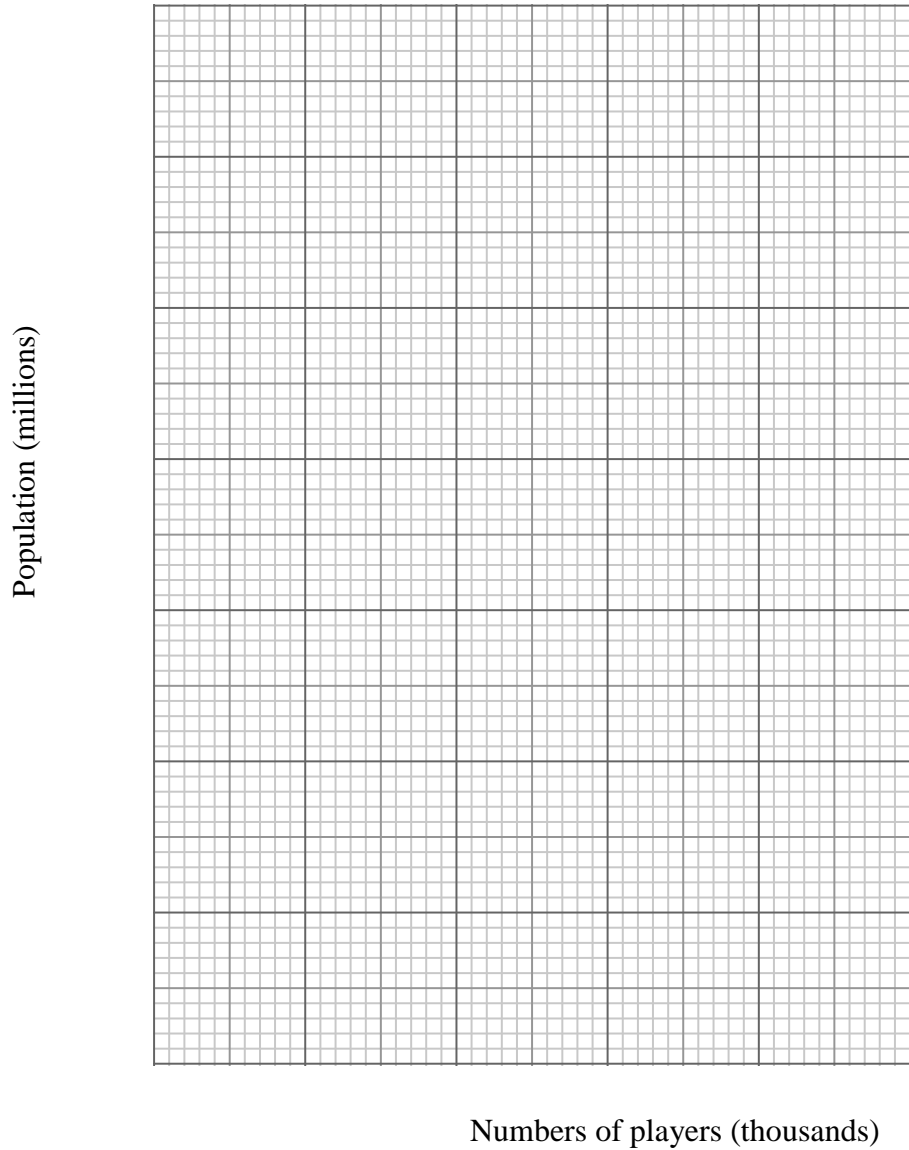
1 (f) the modal class size.
.....
.....
(1 mark)

Section B

Answer **all** questions in the spaces provided.

Use **Rugby** on page 2 of the Data Sheet.

2 (a) Plot the data pairs on the grid below.



(3 marks)

2 (b) Explain how you can tell from the graph that the numbers of players and the populations are not directly proportional.

.....

.....

.....

(2 marks)

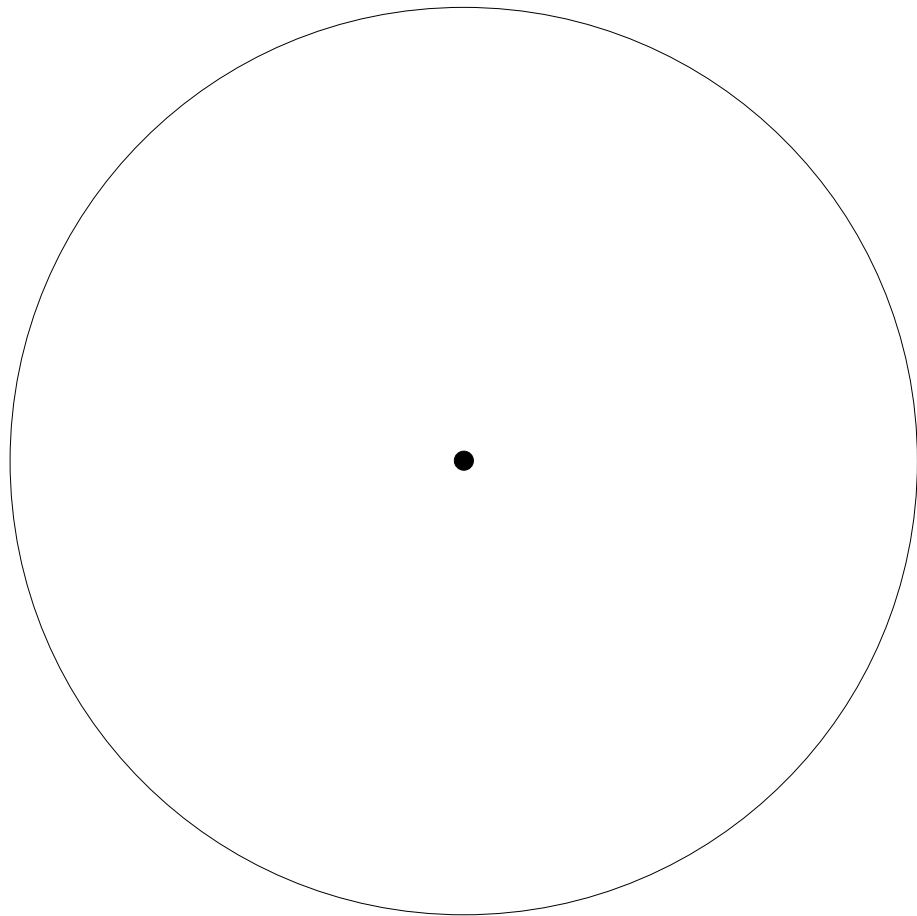
Section C

Answer **all** questions in the spaces provided.

Use Travel in Britain on page 3 of the Data Sheet.

3

Complete the pie chart below to show the five different methods of transport which people use to travel to work.



(5 marks)

Space for working

.....

.....

.....

.....

.....

.....

3 (b)

On a bus there are 40 passengers. The ratio of the number of male passengers to the number of female passengers is 1 : 4.

How many female passengers are on the bus?

.....

.....

.....

(3 marks)

4 (a) The probability that Sam walks to work is 0.3.

What is the probability that Sam does not walk to work?

.....
.....
.....

(2 marks)

4 (b) In one month, Sam goes to work on 20 days.

On how many of these days would you expect Sam to walk to work?

.....
.....
.....

(2marks)

4

Section D

Answer **all** questions in the spaces provided.

Use **Ferry to Calais** on page 3 of the data sheet.

5 Zofia needs to arrive at Calais by 5 pm (French time).

5 (a) What is the departure time of the latest ferry that Zofia should catch?

.....
.....

(1 mark)

5 (b) Calculate the length of time that this journey from Dover to Calais will take.

Give your answer in minutes.

.....
.....
.....

(3 marks)

Section E

Answer **all** questions in the spaces provided.

Use **Social websites** on page 4 of the Data Sheet.

6 Lily asked forty students in a social centre which of the six most popular social websites they had used in the last week. The results of her survey are shown below.

Social website	Tally
Bebo	
BBC Communities	
Facebook	
Friends Reunited	
MySpace	
Windows Live Space	
Not used any of the social websites listed	

6 (a) How can you tell that some of the students had used more than one site?

.....

(1 mark)

6 (b) Another four students entered the social centre and their answers were:

Facebook; MySpace; Facebook, Bebo and MySpace; Facebook.


Add these data to the tally chart above.

(2 marks)

6 (c) Oliver asked the same question to a group of 70 people in a recreation centre:

25 stated that they had only visited one social website in the last week; 15 stated that they visited more than one social website in the last week; 30 did not use any social website.

Represent these data by means of a pictogram.

Use the symbol  to represent 10 people.

(3 marks)

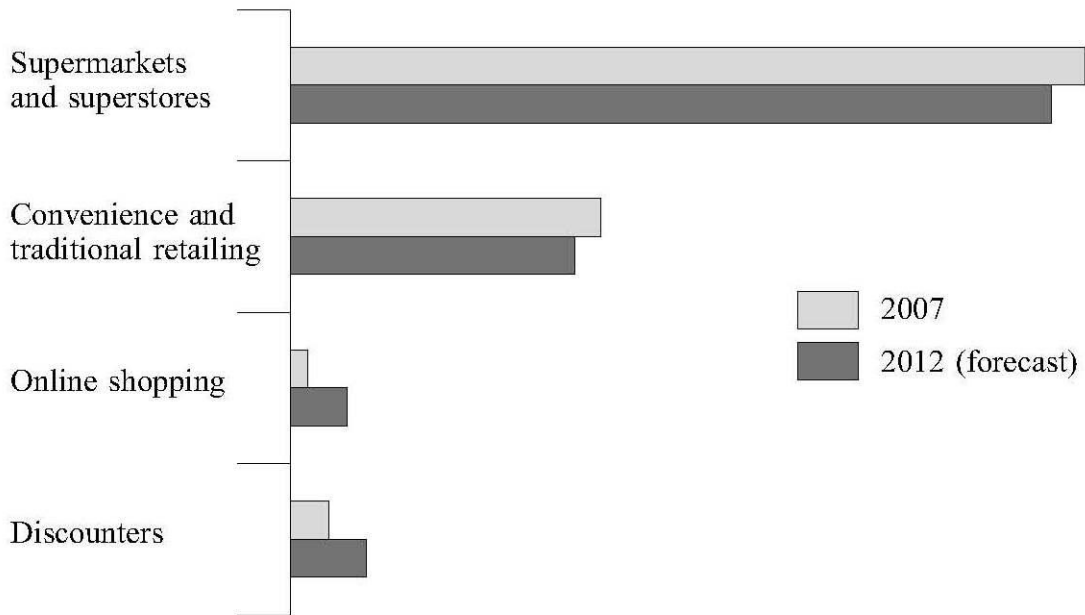
Section F

Answer **all** questions in the spaces provided.

7

The Institute of Grocery Distribution (IGD) reported on their expectations for changes where British shoppers will buy their groceries in 2012 compared with where they had bought their groceries in 2007.

The bar chart below shows the different places in which people buy their food, and the data refer to the years 2007 and 2012.



Which **two** places does the IGD expect to show an increase in the share of the grocery market in 2012?

.....

Answer.....

and.....

(2 marks)

END OF QUESTIONS

2

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Section E: Social Websites 'CAN Facebook BE WORTH ... \$10bn?' by D. Rushe and W.Kay, © *The Times*, 30 September 2009
 Section F: 'Pile it High, Sell it cheap' by S. Hawkes, © *The Times*, 07 July 2008

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