Surname		Other Names	
Centre Number		Candidate Number	
Candidate Signature			

MAKING SENSE OF DATA   **6983/2**
Unit 3

Friday 1 February 2008   9.00 am to 10.00 am

For Examiner's Use

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

For this paper you must have:
- a clean copy of the Data Sheet (enclosed)
- a calculator
- a protractor
- a ruler.

Time allowed: 1 hour

Instructions
- Use blue or black ink or ball-point pen. Pencil should only be used for drawing.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- Answer the questions in the spaces provided.
- Do all rough work in this book. Cross through any work 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 maximum mark for this paper is 40.
- The marks for questions are shown in brackets.
- You are expected to use a calculator where appropriate.

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

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

6983/2

SECTION A

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

Use **Temperatures in Europe** *on page 2 of the Data Sheet.*

1 For the cities listed, find:

(a) the highest temperature;

Answer..
(1 mark)

(b) the lowest temperature;

Answer..
(1 mark)

(c) the range of temperatures;

....

Answer..
(2 marks)

(d) the median temperature;

....

....

....

Answer..
(2 marks)

(e) the mean temperature.

....

....

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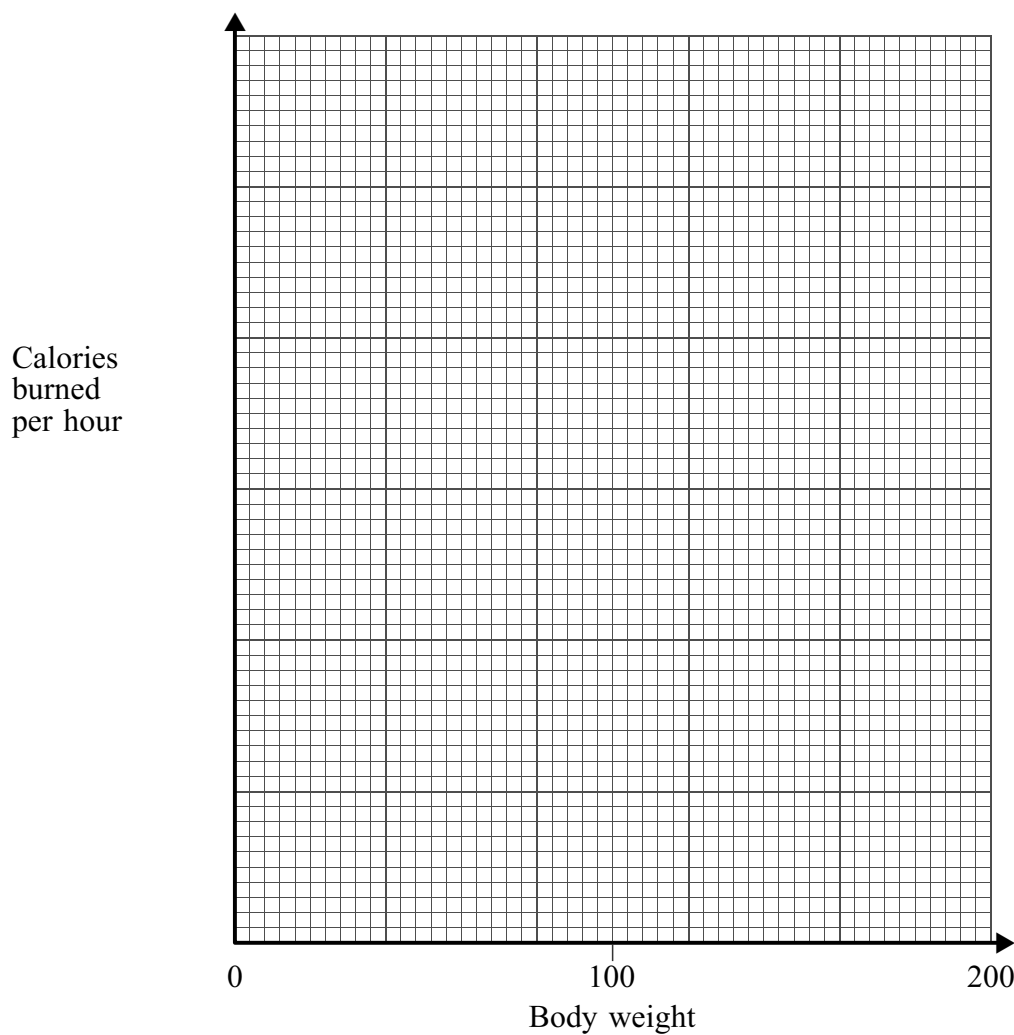Answer..
(3 marks)

SECTION B

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

Use **Calories burned per hour** *on page 2 of the Data Sheet.*

2 (a) On the grid below, plot the data pairs for a person playing tennis.

Calories burned per hour

0   100   200

Body weight

(3 marks)

(b) Explain how you can deduce from the graph that the number of calories burned per hour is directly proportional to the person's body weight.

....

....

....
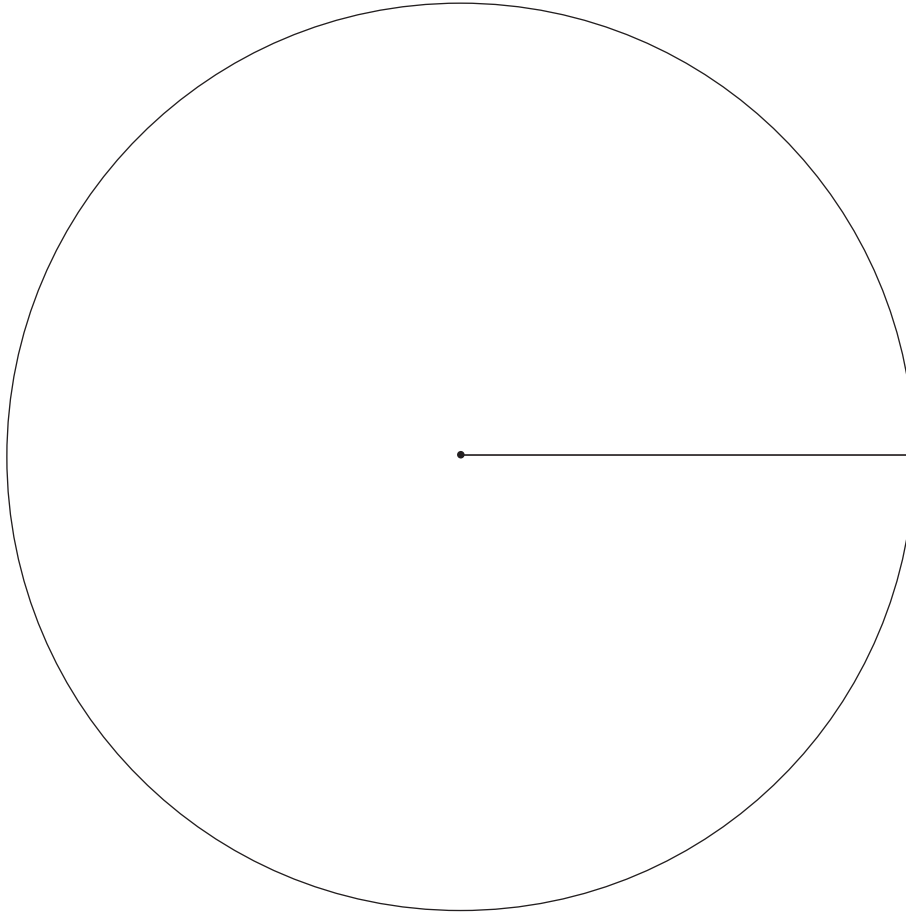
(2 marks)

5

Turn over ▶

SECTION C

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

Use **Cost of owning and running a car** *on page 3 of the Data Sheet.*

3 (a) Complete the pie chart to show the data.

(5 marks)

Space for working

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(b) (i) In 2005, the RAC calculated that the weekly cost of insuring a car was £7.50.

Calculate the annual cost of insurance.

....

....

Answer..

(2 marks)

(ii) In 2004, the annual cost of insurance was £405.

What was the percentage reduction in the cost of insurance in 2005?

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....

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Answer..

(3 marks)

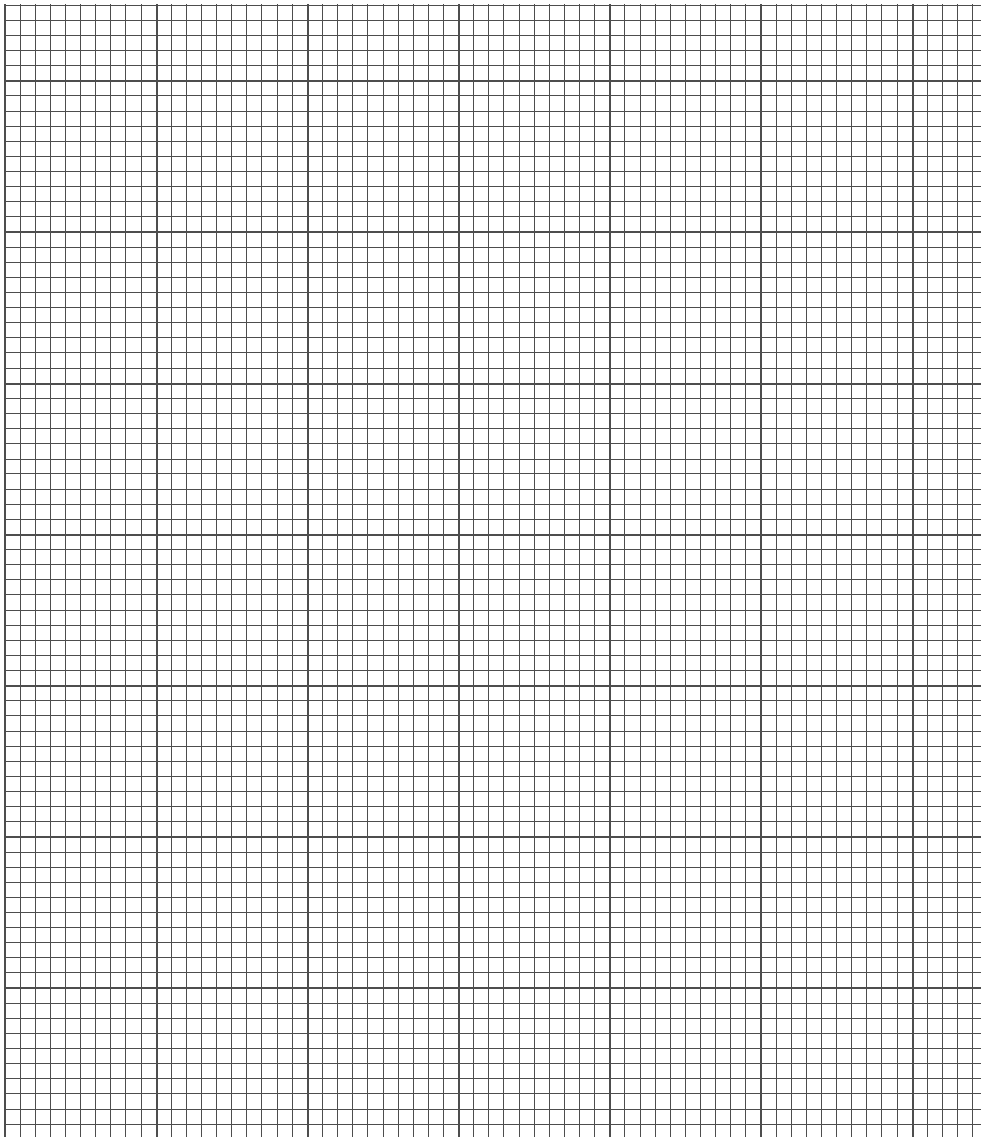**10**

Turn over for the next question

Turn over ▶

SECTION D

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

Use **Airline passengers** *on page 3 of the Data Sheet.*

4 Draw a bar chart to show the numbers of passengers flown by the four airlines during the year.

(4 marks)

4

5 On one flight, there were 60 passengers. The ratio of the number of male passengers to the number of female passengers was 2:3 .

How many male passengers were on this flight?

....

....

Answer...

(3 marks)

3

6 Staff paid £ 60 for a flight, including taxes. The taxes were 30% of this cost.

(a) Express 30% as a fraction.
Give your answer as a fraction in its simplest form.

....

....

Answer...

(1 mark)

(b) Express 30% as a decimal.

....

....

Answer...

(1 mark)

2

Turn over for the next question

Turn over ▶

SECTION E

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

Use **Parking fines** *on page 4 of the Data Sheet.*

7 The spreadsheet below gives the data for the five boroughs.

		A	B	C	D
1		**Borough**	**Appeals allowed**	**Appeals**	**Percentage of appeals allowed**
2		Barnet	1503	2700	
3		Islington	1310	2080	
4		Kensington and Chelsea	1886	2898	
5		Lambeth	2657	3638	
6		Westminster	5254	8936	

(a) Complete the spreadsheet to show the percentages of appeals which have been allowed.
Give the percentages to the nearest integer.

(4 marks)

Space for working

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(b) State the formula which gives the value in cell D4.

....

Answer...

(1 mark)

(c) In the same year, 24 739 motorists appealed against a fine given to them for not paying the London congestion charge.

Of these appeals, 76% were allowed.

How many appeals were allowed?

....

....

....

Answer...

(2 marks)

7

END OF QUESTIONS

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