

Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										



Free-Standing Mathematics Qualification
 Foundation Level
 June 2015

Using Data

4983

Unit 3

Monday 11 May 2015 1.30 pm to 2.30 pm

- | |
|---|
| <p>For this paper you must have:</p> <ul style="list-style-type: none"> • a clean copy of the Data Sheet (enclosed) • a calculator • a protractor • a ruler. |
|---|

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.

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



J U N 1 5 4 9 8 3 0 1

Section A

Answer **all** questions.

Answer each question in the space provided for that question.

Use **Bus timetable** on page 2 of the Data Sheet.

1 (a) Lior catches the bus home from work. He gets on the 17 15 bus at Perry Street.
What time does this bus arrive at New Ash Green?

[1 mark]

Answer

1 (b) On Thursday, he works late and gets to Perry Street at 6.30 pm. What is the earliest
bus he can catch to New Ash Green?

[1 mark]

Answer

1 (c) On Friday he goes out for a meal after work and catches the 20 09 bus from
Gravesend to New Ash Green.

How long does this journey take?

[2 marks]

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.....

Answer

4



Section B

Answer **all** questions.

Answer each question in the space provided for that question.

Use **E-reader** on page 2 of the Data Sheet.

2 (a) Libby is buying an e-reader and some e-books. Her grandmother has agreed to share the costs with her in the ratio 3:2 with Libby's grandmother paying more.

The total cost of the e-reader and e-books is £132.20 .

How much does Libby have to pay?

[4 marks]

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Answer

2 (b) Libby pays $\frac{3}{10}$ of the cost of a case for the e-reader.

2 (b) (i) What is $\frac{3}{10}$ as a decimal?

[1 mark]

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.....

Answer

2 (b) (ii) What is $\frac{3}{10}$ as a percentage?

[1 mark]

.....
.....

Answer

6

Turn over ►



Section C

Answer **all** questions.

Answer each question in the space provided for that question.

Use **Soap operas** on page 3 of the Data Sheet.

3 (a) (i) Which programme has run for the **fewest** number of years?

Put a tick (✓) against the one correct answer.

[1 mark]

Coronation Street	
Eastenders	
Emmerdale	
Hollyoaks	
Home and Away	
Neighbours	

3 (a) (ii) Which programme has had the **most** births?

Put a tick (✓) against the one correct answer.

[1 mark]

Coronation Street	
Eastenders	
Emmerdale	
Hollyoaks	
Home and Away	
Neighbours	

3 (b) What is the mode of the numbers in the “Number of years since the programme began” column?

[1 mark]

Answer

3 (c) Here are the numbers of births again.

47 31 32 15 22 18

What is the median number of births?

[3 marks]

.....
.....

Answer

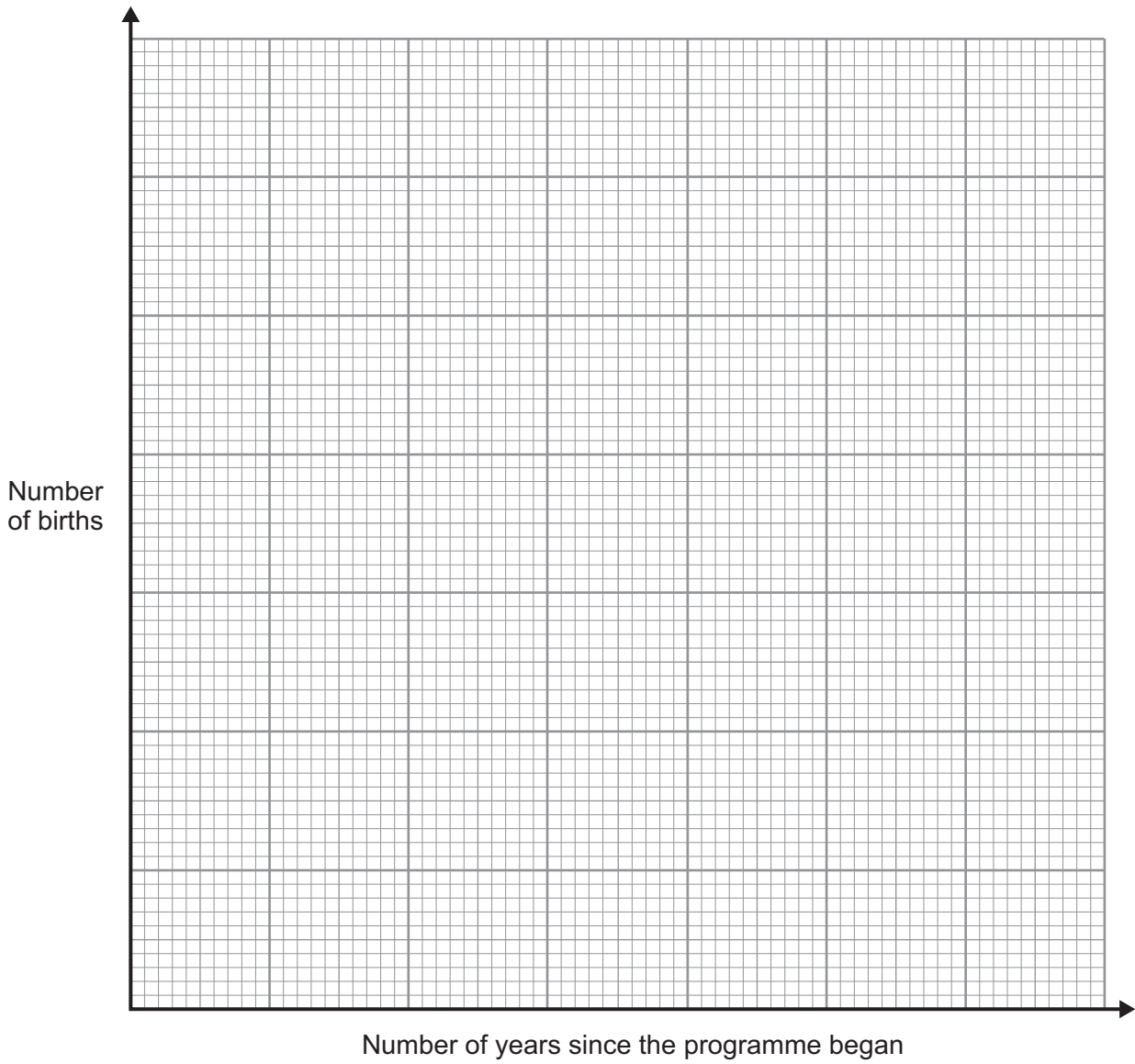
6



4 (a)

On the grid below, plot the data pairs for the number of years since the programme began and the number of births.

[4 marks]



4 (b) (i)

Draw a line on your graph to show the trend of the data.

[1 mark]

4 (b) (ii)

Use your trend line to write a conclusion about the number of years since a programme began and the number of births.

[1 mark]

.....
.....

6

Turn over ►



Section D

Answer **all** questions.

Answer each question in the space provided for that question.

Use **Ice cream** on page 3 of the Data Sheet.

5 (a) In the shop, 40 tubs of ice cream were finished last week.

Use the Data Sheet to find how many tubs of strawberry ice cream were finished last week.

[3 marks]

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Answer

5 (b) Millie orders these tubs of ice cream for a special party.

Flavour	Number of tubs
Chocolate	7
Raspberry	3
Vanilla	5
Bubble gum	1
Strawberry	2

Millie chooses one of these tubs at random.

5 (b) (i) What is the probability that she chooses raspberry?

Give your answer as a fraction in its simplest form.

[2 marks]

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.....

Answer

5 (b) (ii) What is the probability that Millie does **not** choose chocolate?

[2 marks]

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.....

Answer

7



Section E

Answer **all** questions.

Answer each question in the space provided for that question.

Use **Cash machines** on page 4 of the Data Sheet.

6 What percentage of the cash machines in Luton North could be removed? **[3 marks]**

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Answer

3

Turn over for the next question

Turn over ►



Section FAnswer **all** questions.

Answer each question in the space provided for that question.

*Use **Tour of Britain** on page 4 of the Data Sheet.***7 (a)** The individual time trials in Stage 3 of the race covered a distance of 16 km.

Stage 7 of the race ended in Guildford.

Put these two pieces of information in the table below.

[2 marks]

Stage	Start point	End point	Distance covered (km)
1	Peebles	Drumlanrig Castle	209.9
2	Carlisle	Kendal	
3	Individual time trials		
4	Stoke-on-Trent	Llanberis	188.4
5	Machynlleth	Caerphilly	177.1
6	Sidmouth	Dartmoor	137
7	Epsom		155
8	London	London	88

7 (b) (i) The mean distance cycled each day was 144.75 km.

Calculate the total distance covered in this race.

[2 marks]

.....

.....

Answer



7 (b) (ii) Calculate the distance covered in Stage 2, Carlisle to Kendal.

Use the information from part **(b)(i)**.

Give your answer to the nearest km.

You must show your working.

[4 marks]

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Answer

8

END OF QUESTIONS



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