

Paper Reference 1ST0/1H
Pearson Edexcel
Level 1/Level 2 GCSE (9–1)

Statistics
Paper 1
(Calculator)
Higher Tier

Thursday 13 June 2019 – Afternoon

Data Book

In the boxes below, write your name, centre number and candidate number.

Surname					
Other names					
Centre Number					
Candidate Number					

INSTRUCTIONS

There may be spare copies of some data sheets in case you need them.

THIS DATA BOOK *MUST* BE RETURNED WITH THE QUESTION PAPER AT THE END OF THE EXAMINATION.

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Question 1

Key:

Number of children

9 or more

6 – 8

3 – 5


0 – 2

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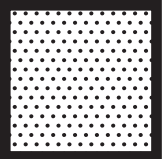
Question 1

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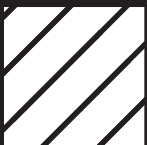
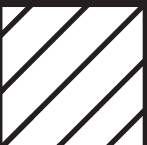
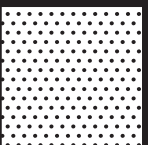

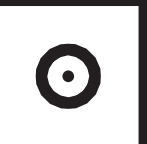
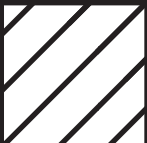
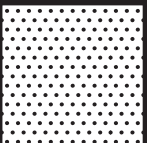
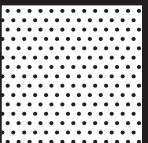


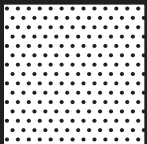
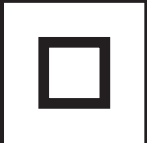
6 – 8



3 – 5

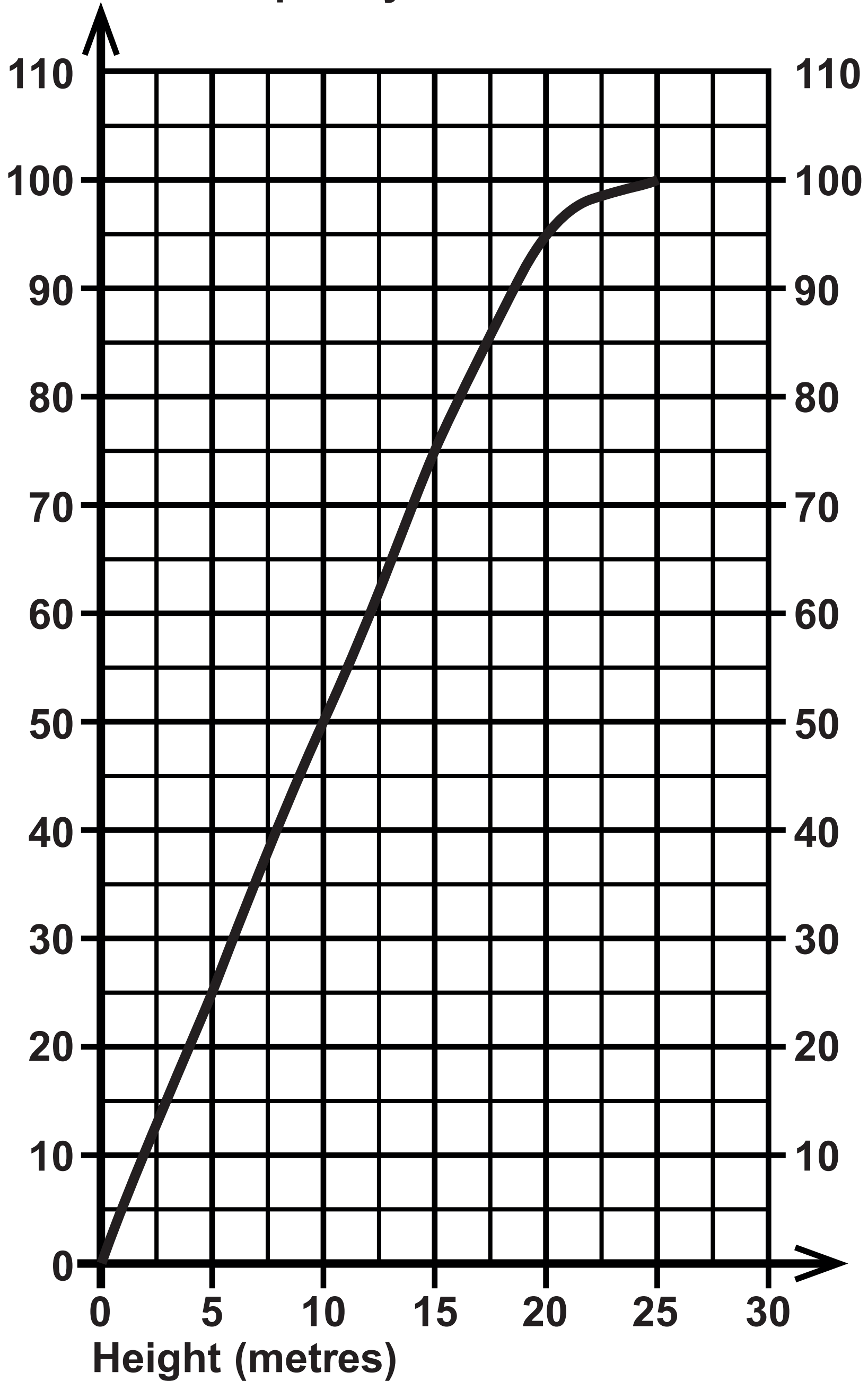


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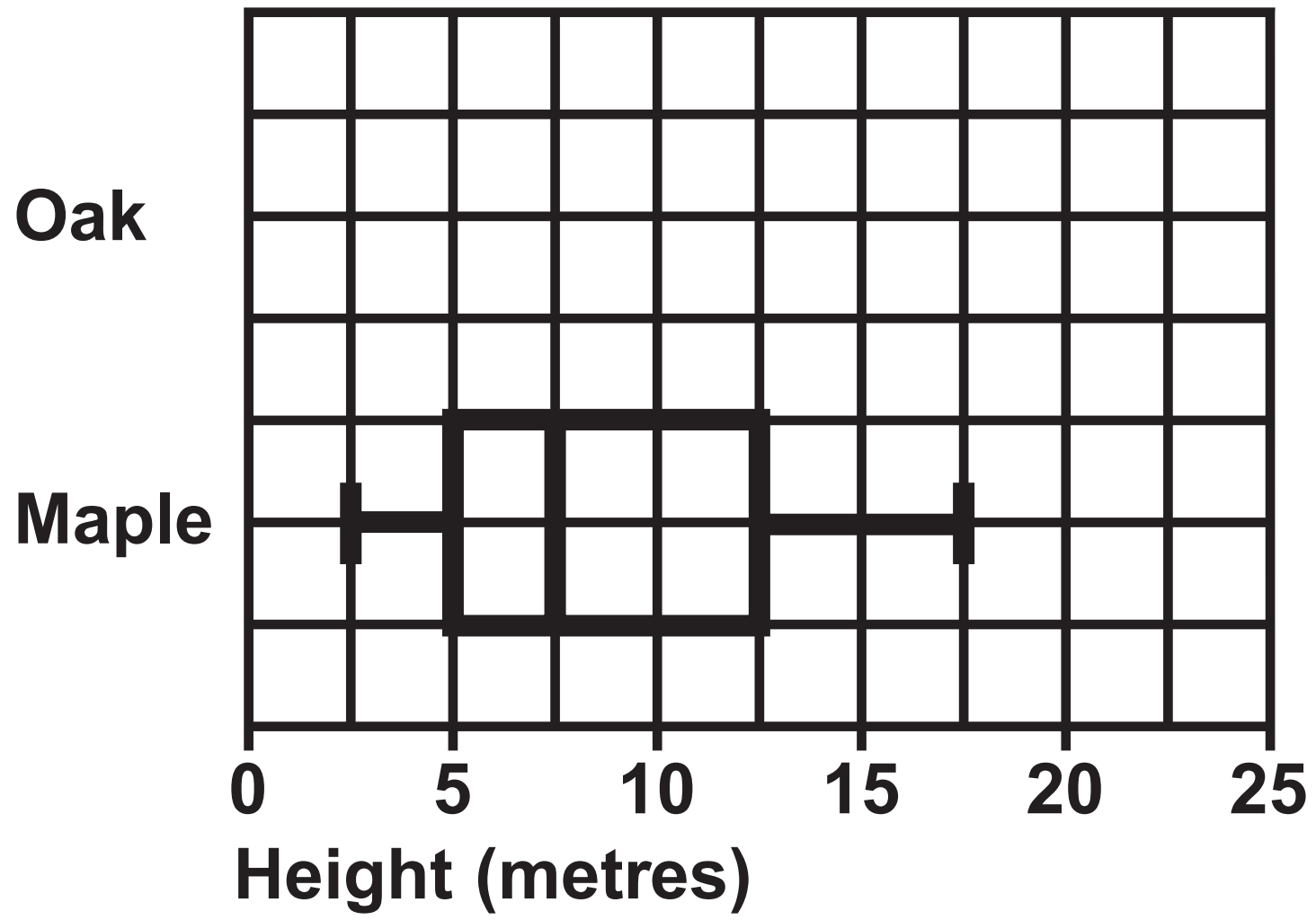
				
				
				
				

Question 2

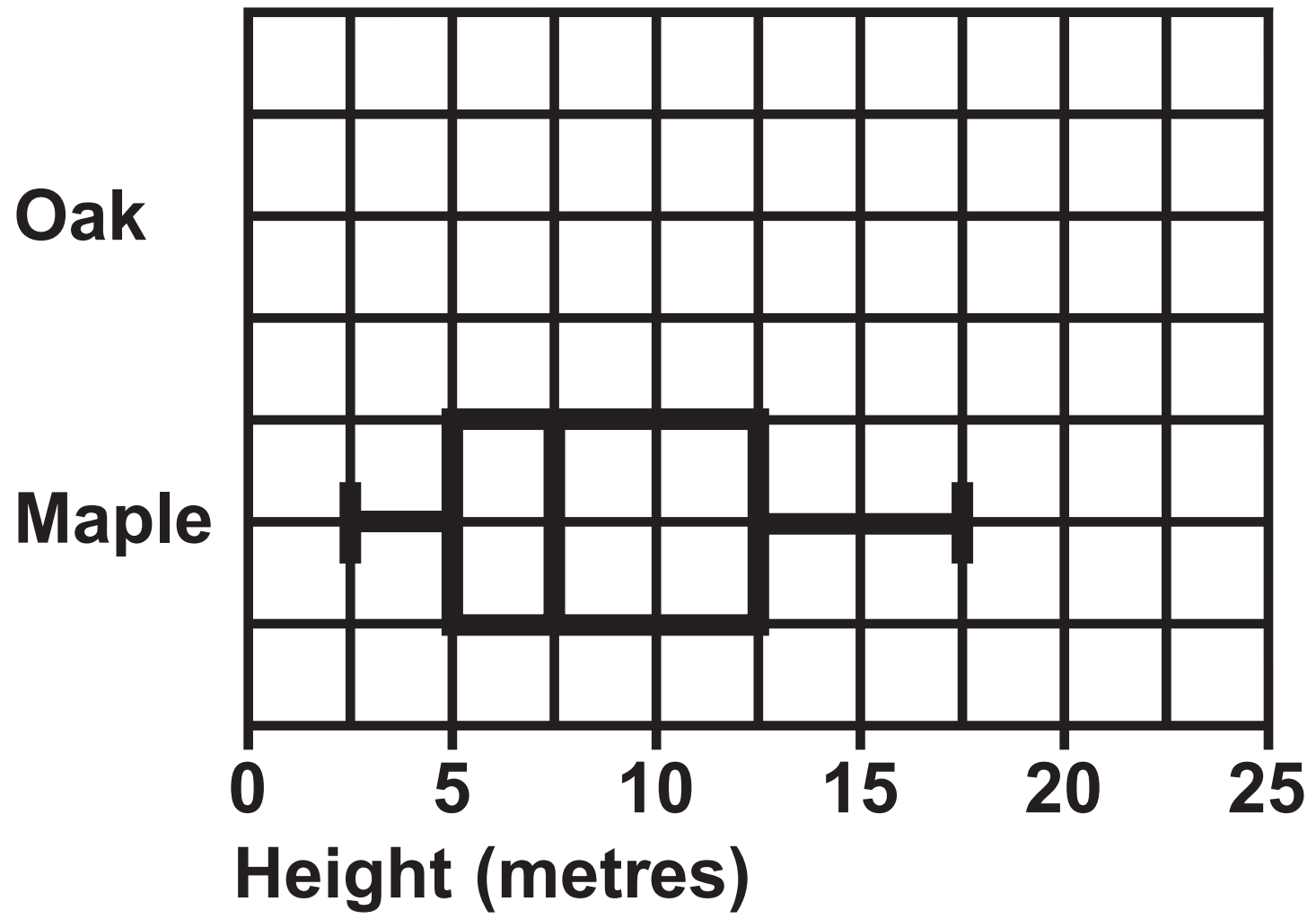
Cumulative frequency

(Adapted from: opendata.camden.gov.uk)

Question 2(b)



Question 2(b)



Question 3

Type of school	Applications in 2016		
	Gender		Total
	Male	Female	
Maintained	3674	2899	6573
Independent	1510	1268	2778
Other and Overseas	300	312	612
Total	5484	4479	9963

(Source: www.cam.ac.uk)

Variable	Type of variable		
	Explanatory	Response	Extraneous
	Age		
	Left/Right handedness		
	Gender		
	Number of objects remembered		

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Question 6

Table 1

Caribbean island	Crude birth rate	Crude death rate
Barbados	11·995	10·661
Saint Lucia	12·239	7·472

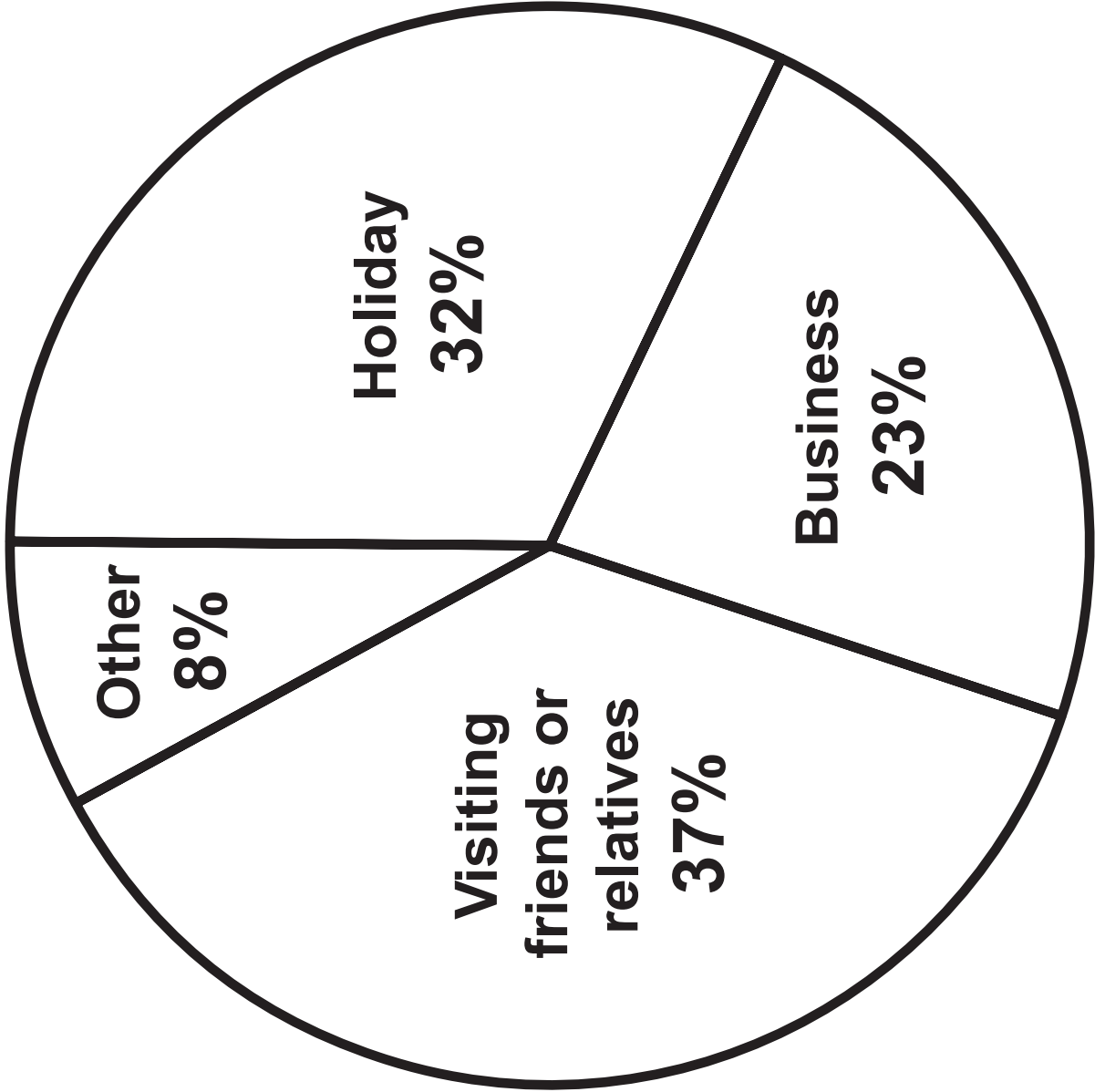
(Source: www.data.worldbank.org)

Table 2

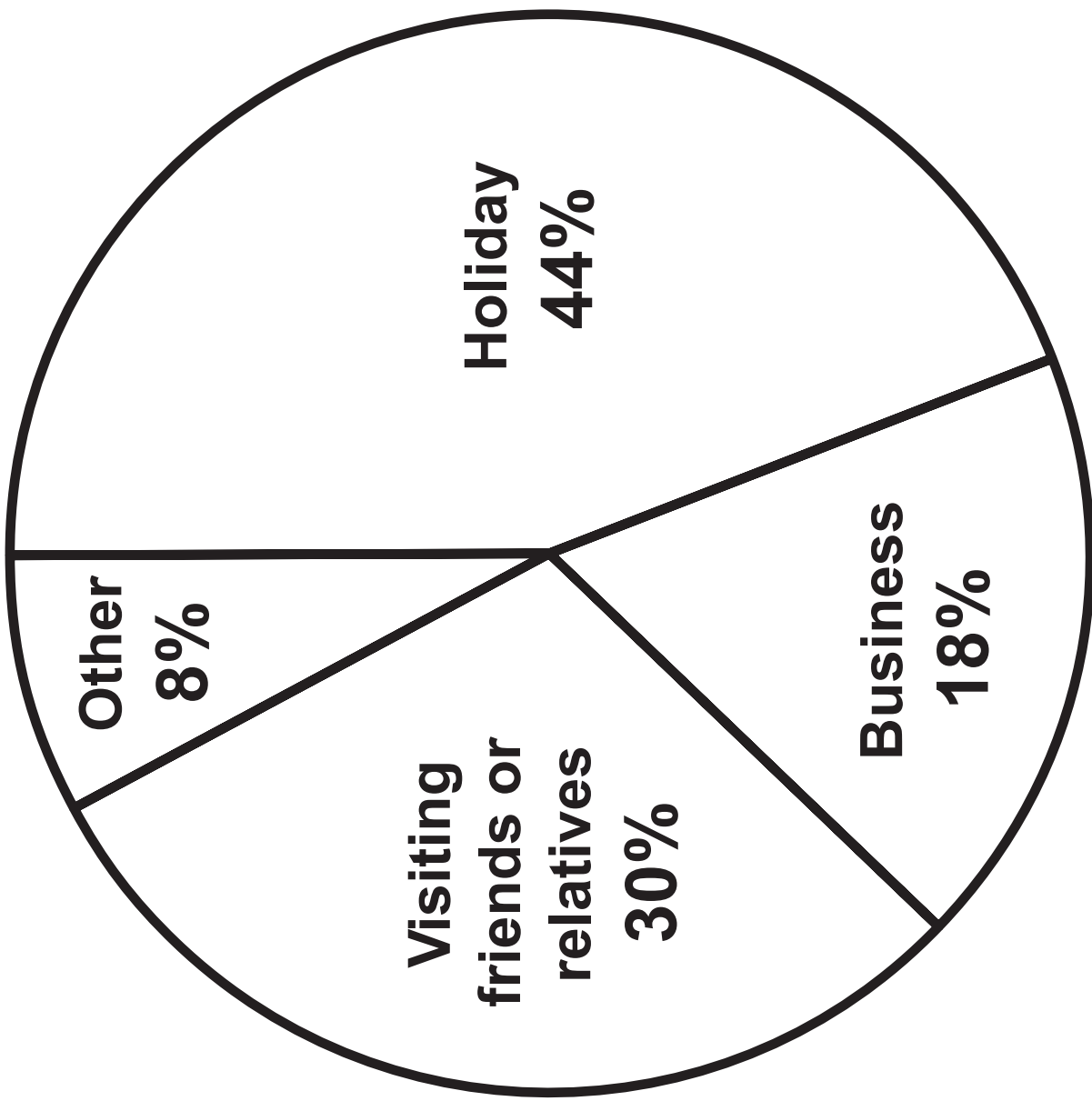
Standard population	
Age Group	Saint Lucia
60 to 69	64
70 to 79	39
80 and over	22

Question 7

January 2017



July 2017



(Source: www.ons.gov.uk)

Question 7(c)

Month	Total number of visitors (thousands)
January 2017	2931
July 2017	4020

Question 8

Weight (kg) for Boys (B) and Girls (G)									
Age (months)	Percentile								
	9th		25th		50th		91st		
	B	G	B	G	B	G	B	G	
3	5·45	4·9	5·9	5·4	6·2	5·85	7·35	6·9	
4	6·1	5·45	6·5	5·9	7	6·4	8·15	7·6	
5	6·5	5·9	7	6·4	7·5	6·9	8·7	8·25	
6	6·8	6·2	7·4	6·7	7·9	7·5	9·2	8·6	

(Source adapted from: www.rcpch.ac.uk)

Question 9

Giovani goes to the region of Ontario, captures a sample of **250** reindeer, attaches a tag to each reindeer and then releases the **250** reindeer back into the same region of Ontario.

Three days later, Giovani returns to the same region of Ontario and catches a sample of **98** reindeer.

He finds that **5** of these reindeer are tagged.

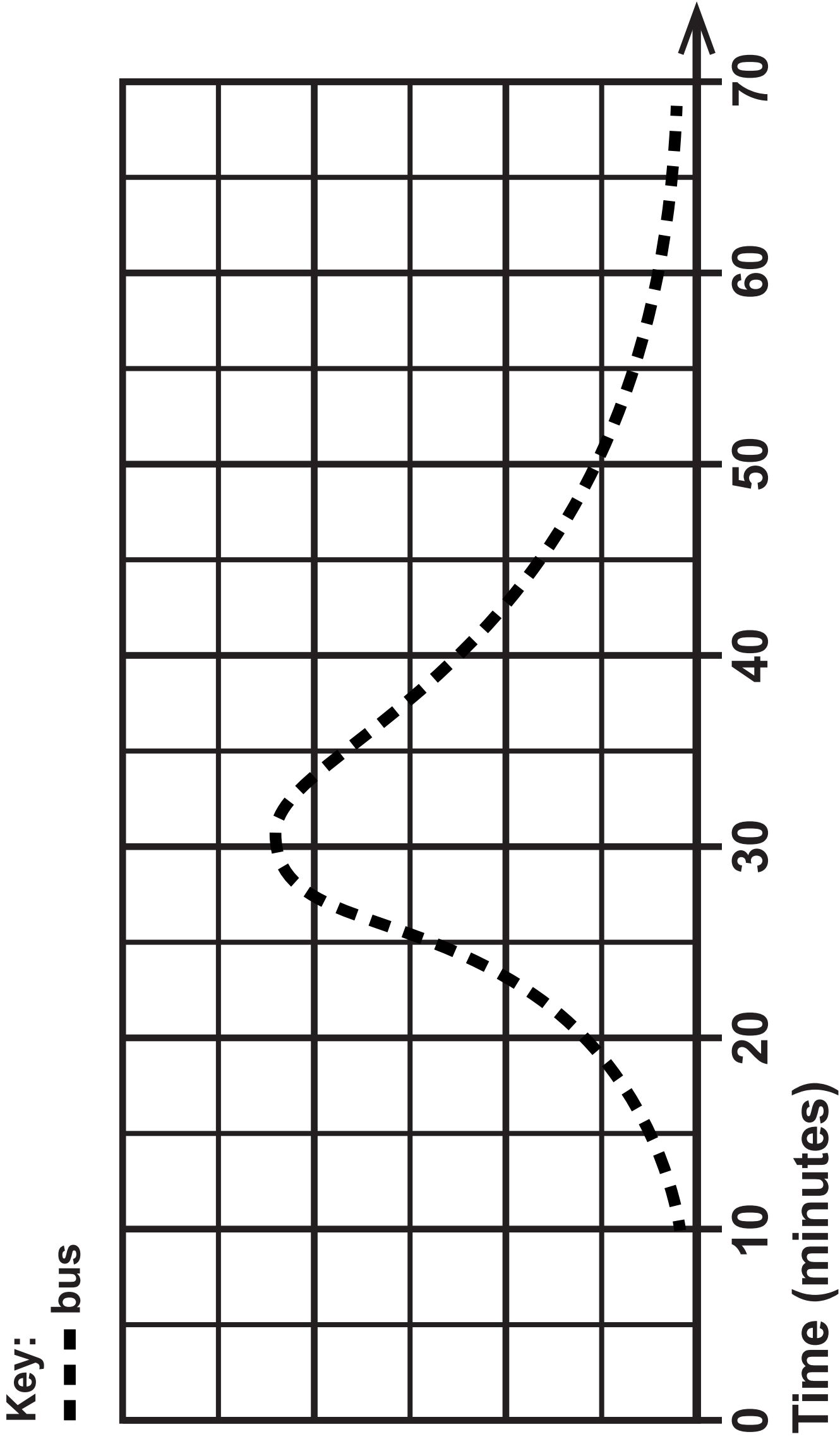
Giovani concludes that this information can be used to verify the estimate of **5000**

Question 10

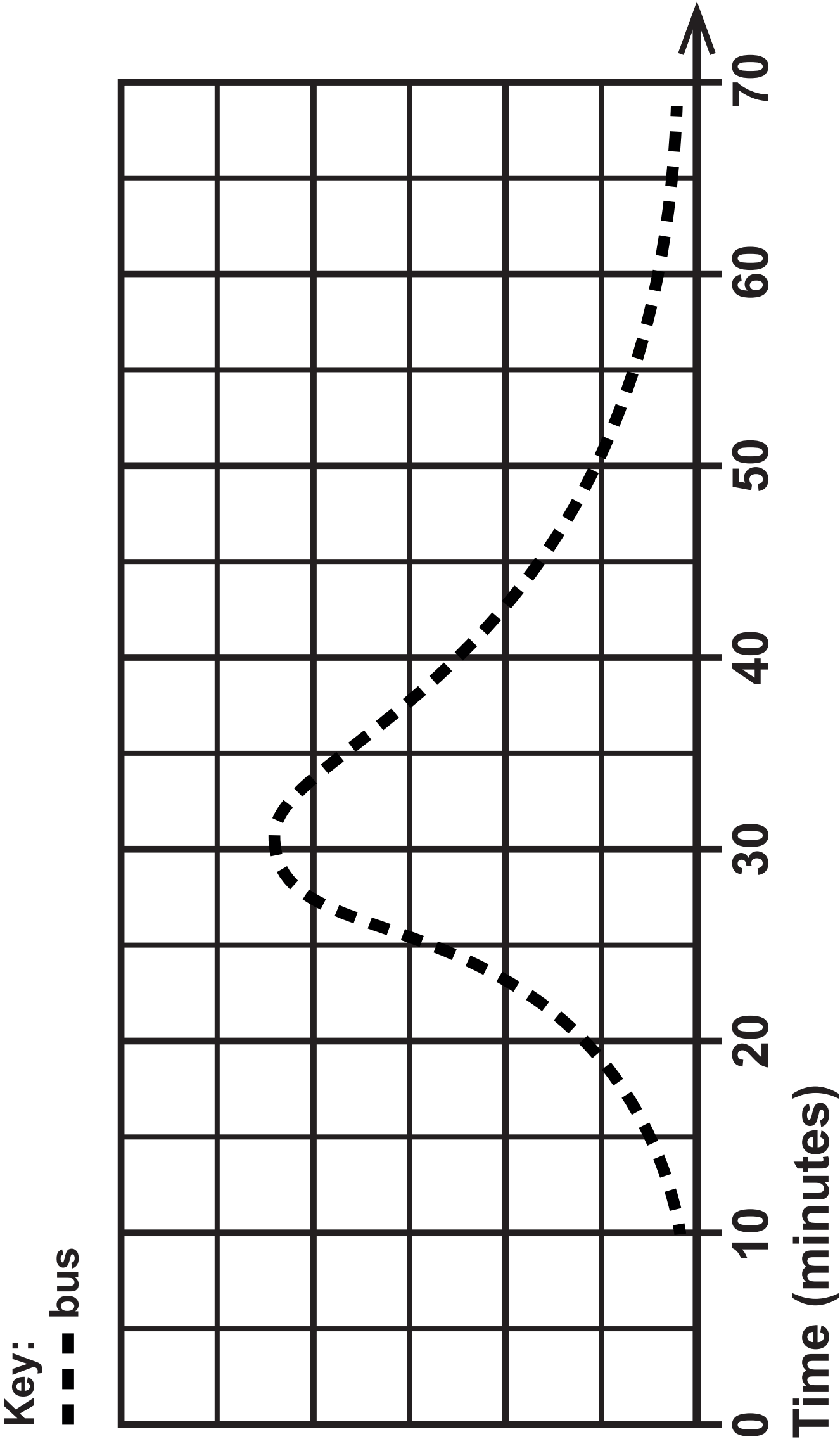
Time spent on social media (t minutes)	Frequency
$0 \leq t < 50$	1
$50 \leq t < 100$	4
$100 \leq t < 150$	8
$150 \leq t < 200$	17
$200 \leq t < 300$	16

Question 10(b)

Mean (minutes)	Standard deviation (minutes)	Median (minutes)
125	25	130



Question 11(b)



Question 12

Class	Number of students in the class	Class mean mark
A	28	63
B	32	72
C	n	55

Question 12(c)

The three classes have also taken a mathematics test.

Mr Singh thinks that there is a relationship between the science marks and the mathematics marks.

He draws a scatter diagram for each of the three classes.

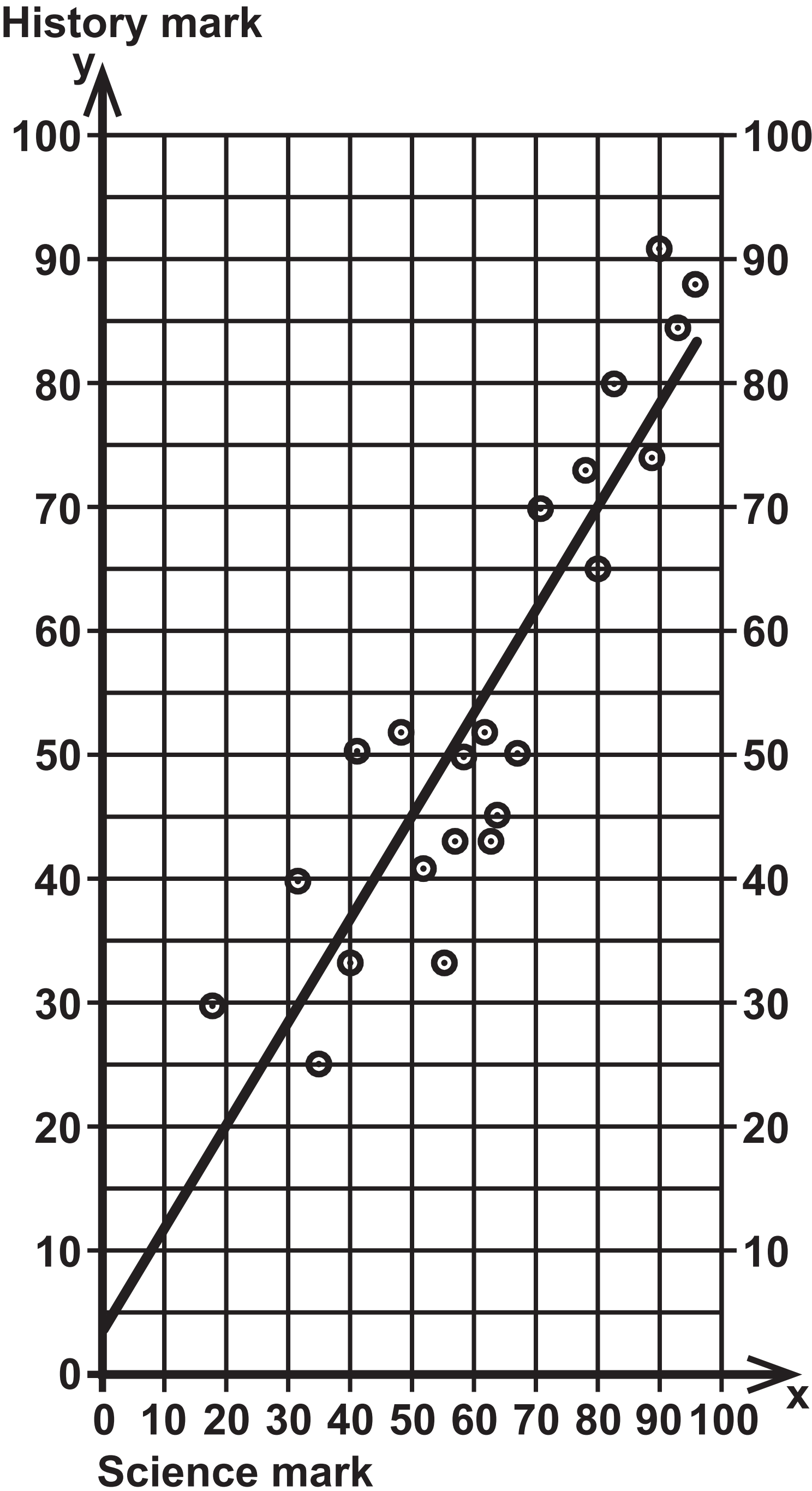
For each diagram, he used the science mark, X , for each student in the class as the explanatory variable and the corresponding mathematics mark, m , as the response variable.

Mr Singh then used statistical software to find the equation of the regression line for the data in each scatter diagram.

Here are the equations.

Class	Equation of regression line
A	$m = 1.4x - 1$
B	$m = 1.2x + 5$
C	$m = -1.3x + 4$

Question 12(d)



Question 13

Roll a fair dice.

If you get 1, 2, 3 or 4 tick box **A**

If you get 5 or 6 answer this question.

Have you ever taken a sick day off work when you weren't really sick?

If yes, tick box **A**

If no, tick box **B**

A	<input type="checkbox"/>	B	<input type="checkbox"/>
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