

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

Statistics
Paper 1
Higher Tier
(Calculator)

Monday 12 June 2023 – Afternoon

Data Booklet

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 BOOKLET *MUST* BE RETURNED WITH THE QUESTION PAPER AT THE END OF THE EXAMINATION.

Contents

Page

4	Question 1
5	Questions 2(b) and 2(c)
6	Question 2(e)
7	Question 3 – Diagram 1
8	Question 3 – Diagram 2
9	Question 4
10	Question 5(b)
11	Question 6
12	Question 7
13	Question 8
14	Question 9 – Diagram 1
15	Question 9 – Diagram 2
16	Question 10
17	Question 11(b)
18	Question 11(c)

Spare Copies

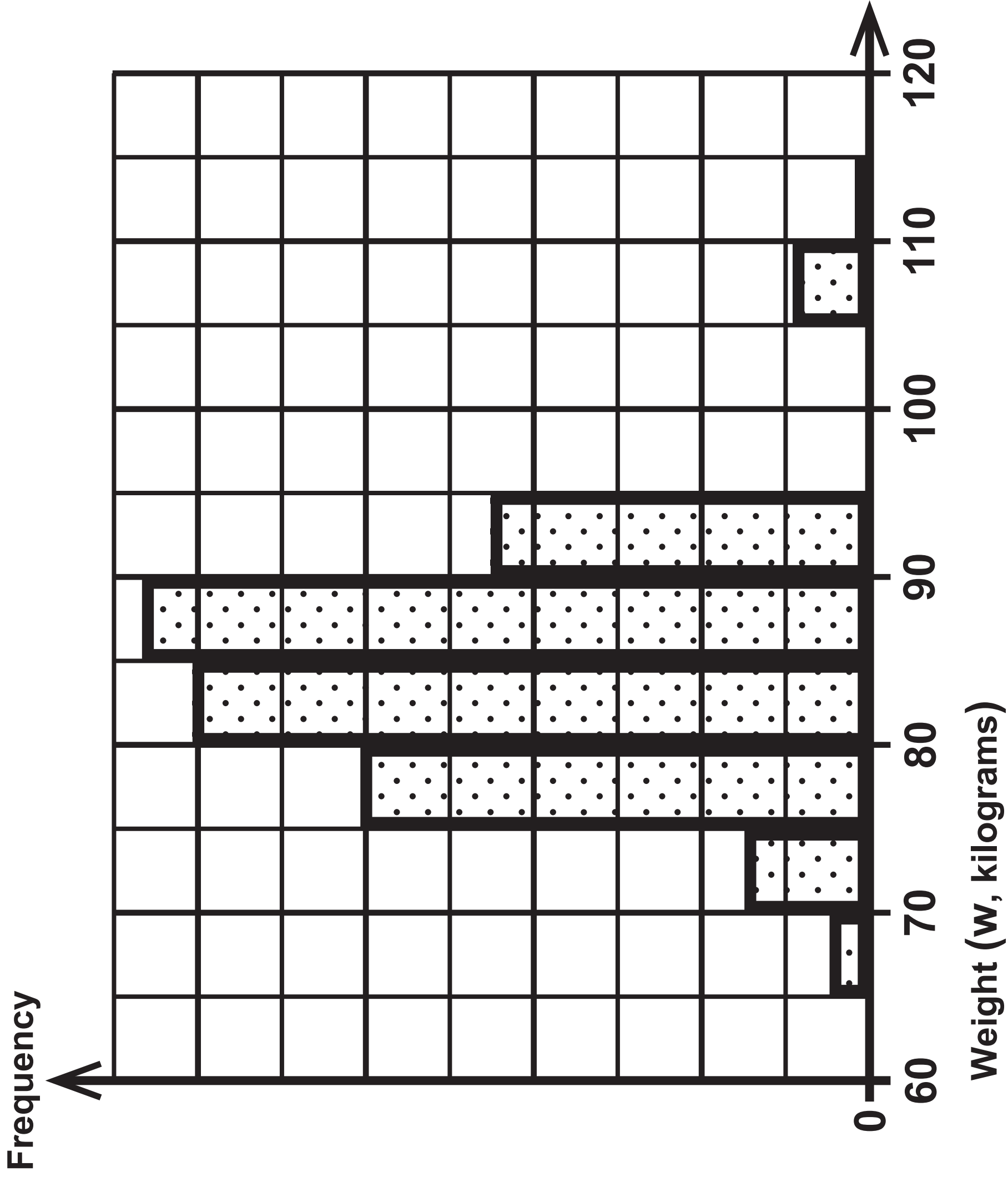
19	Question 1
20	Questions 2(b) and 2(c)
21	Question 2(e)
22	Question 3 – Diagram 2
23	Question 5(b)
24	Question 6
25	Question 8

Question 1

Key:

2017 season		2018 season
	1	9
	2	5 6 9
	3	5 7 9
	4	3 3 5 5 5 7
	5	0 2 2 4 6 8 8
	6	4 5 6
	7	0 2
	8	
	9	0

Questions 2(b) and 2(c)



Height (h centimetres)	Frequency		
$170 < h \leq 180$	12		
$180 < h \leq 190$	146		
$190 < h \leq 200$	175		
$200 < h \leq 210$	323		
$210 < h \leq 220$	146		
$220 < h \leq 230$	8		
Total	810		

Diagram 1

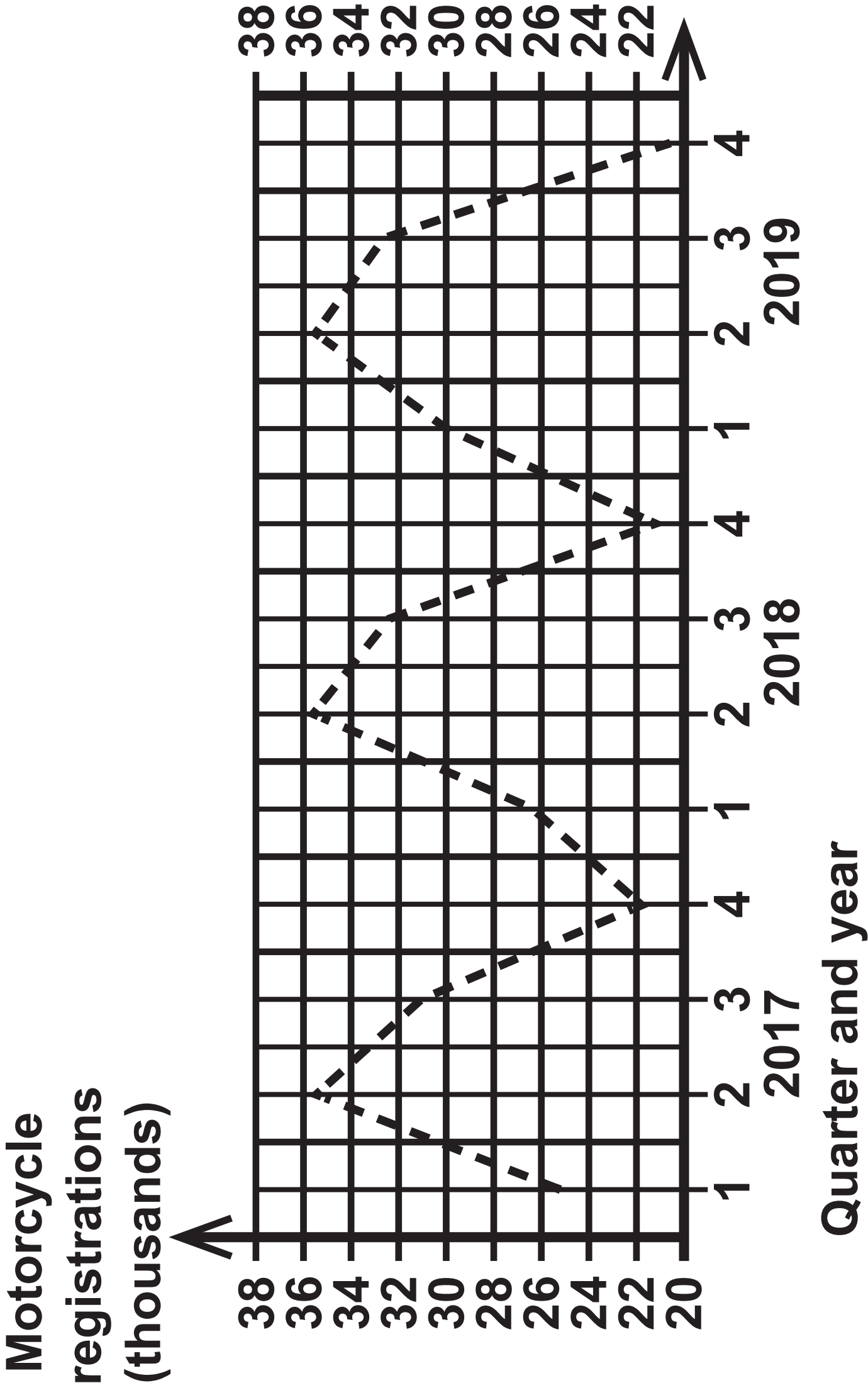
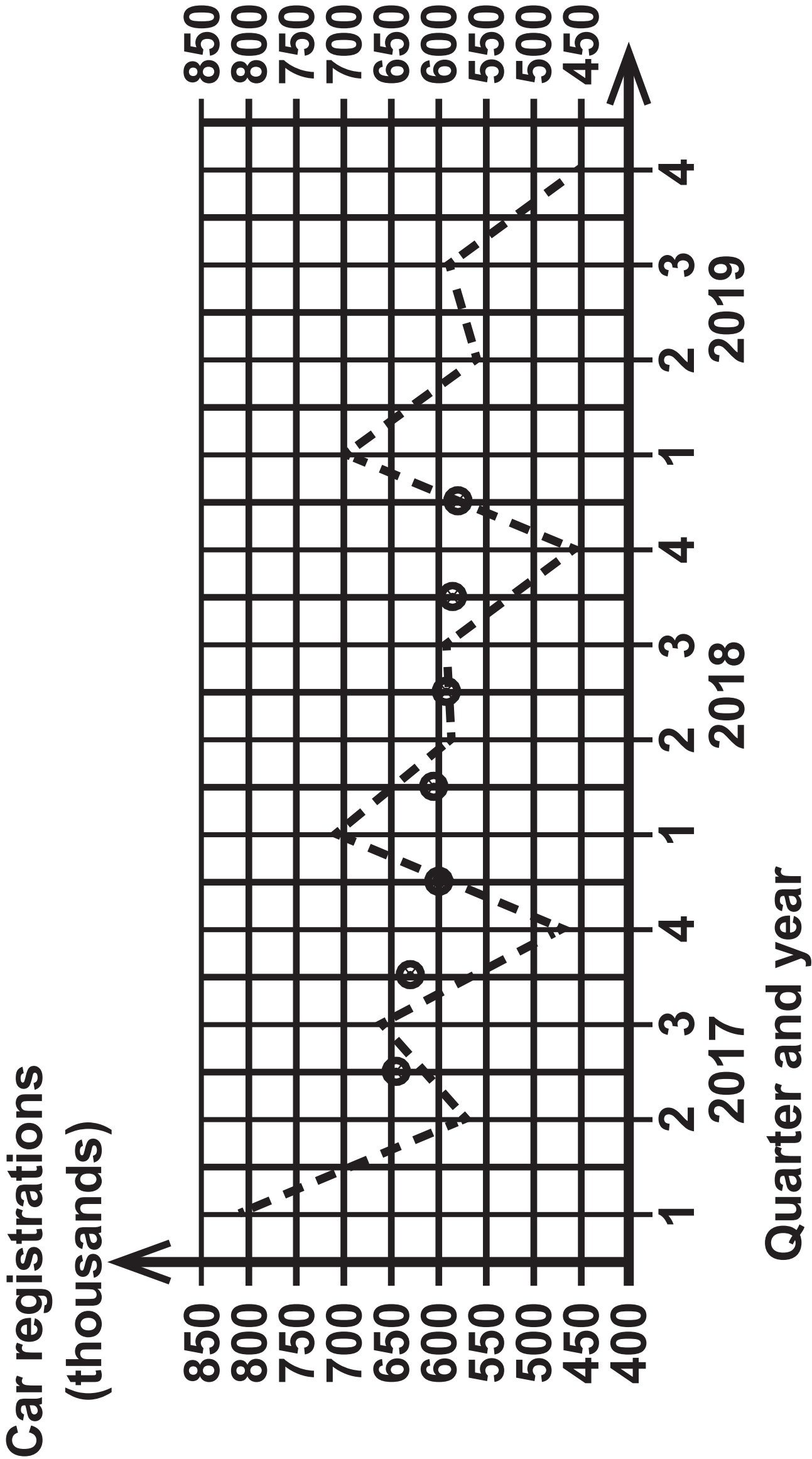


Diagram 2



Question 4

Collecting data

- Ask all **50** of the students in his school athletics club to take part in the investigation.
- Ask each student to complete a long jump and measure their distance jumped.
- Ask each student to record their gender, age, height and distance jumped on his spreadsheet.

Processing and presenting data

- Produce two scatter diagrams – one for male students and one for female students.
- Plot the scatter diagrams with distance jumped on the horizontal axis and height of the student on the vertical axis.
- Look for outliers on the scatter diagram.
- Insert a line of best fit through the double mean point on each scatter diagram.
- Use the line of best fit to predict the results for the athletes at the Olympic Games.

Photography entry	Mrs John’s rank	Mr Nowak’s rank		
A	3	1		
B	6	6		
C	2	5		
D	4	3		
E	7	8		
F	1	4		
G	8	7		
H	5	2		

	Monthly average price (£)	Chain base index number
Jan	1001·4	
Feb	1014·2	101·3
Mar	988·1	97·4
Apr	986·8	99·9
May	1000·0	101·3
Jun	1071·9	

Initial sample size	683
Second sample size	587
Number of tagged fish in second sample	148

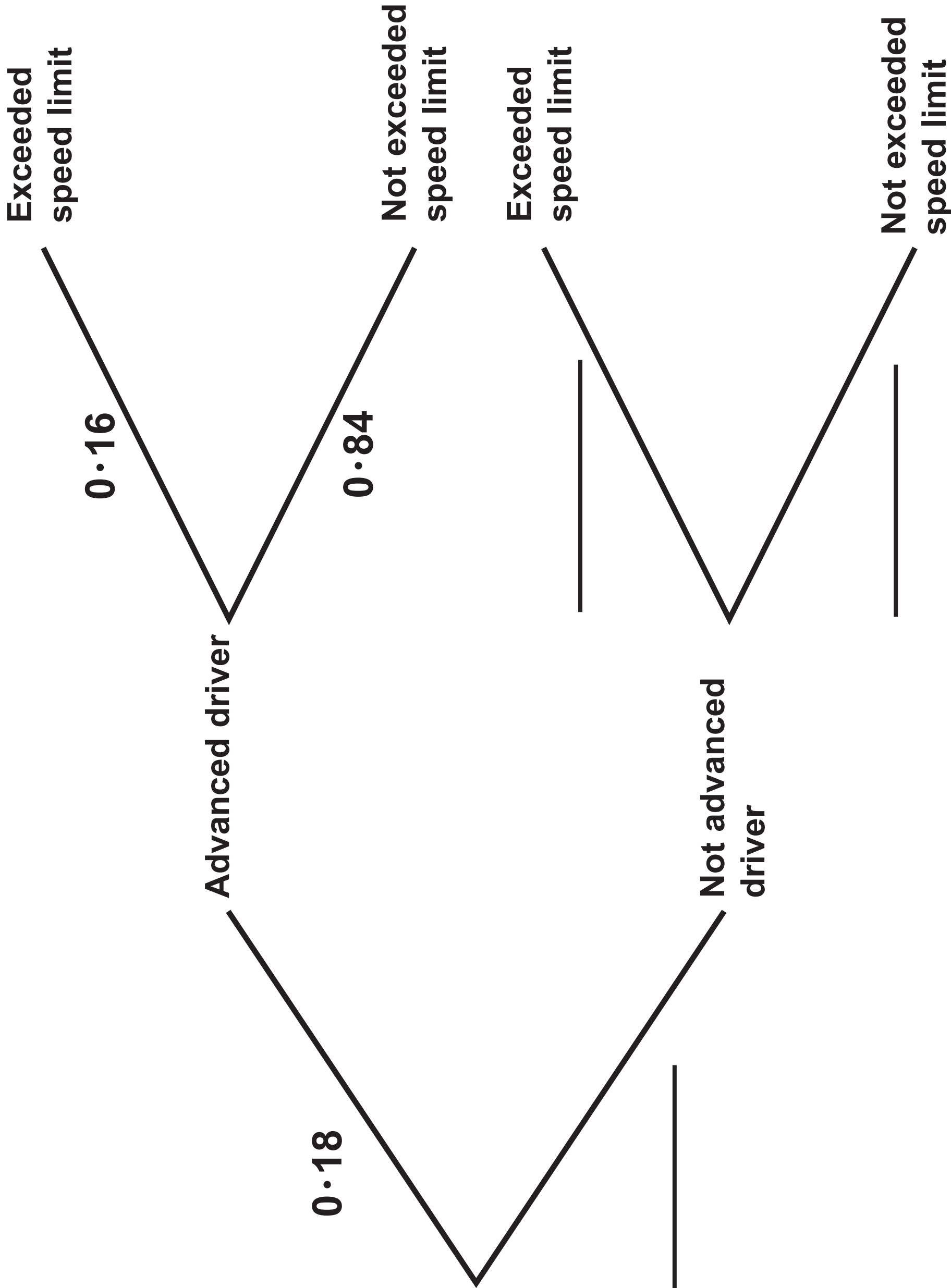


Diagram 1

Male handspans

Minimum	18.0	Mean	22.3	Standard deviation	1.44
Maximum	25.5	Median	22.0	Skewness	0.630
Number of male handspans		78			

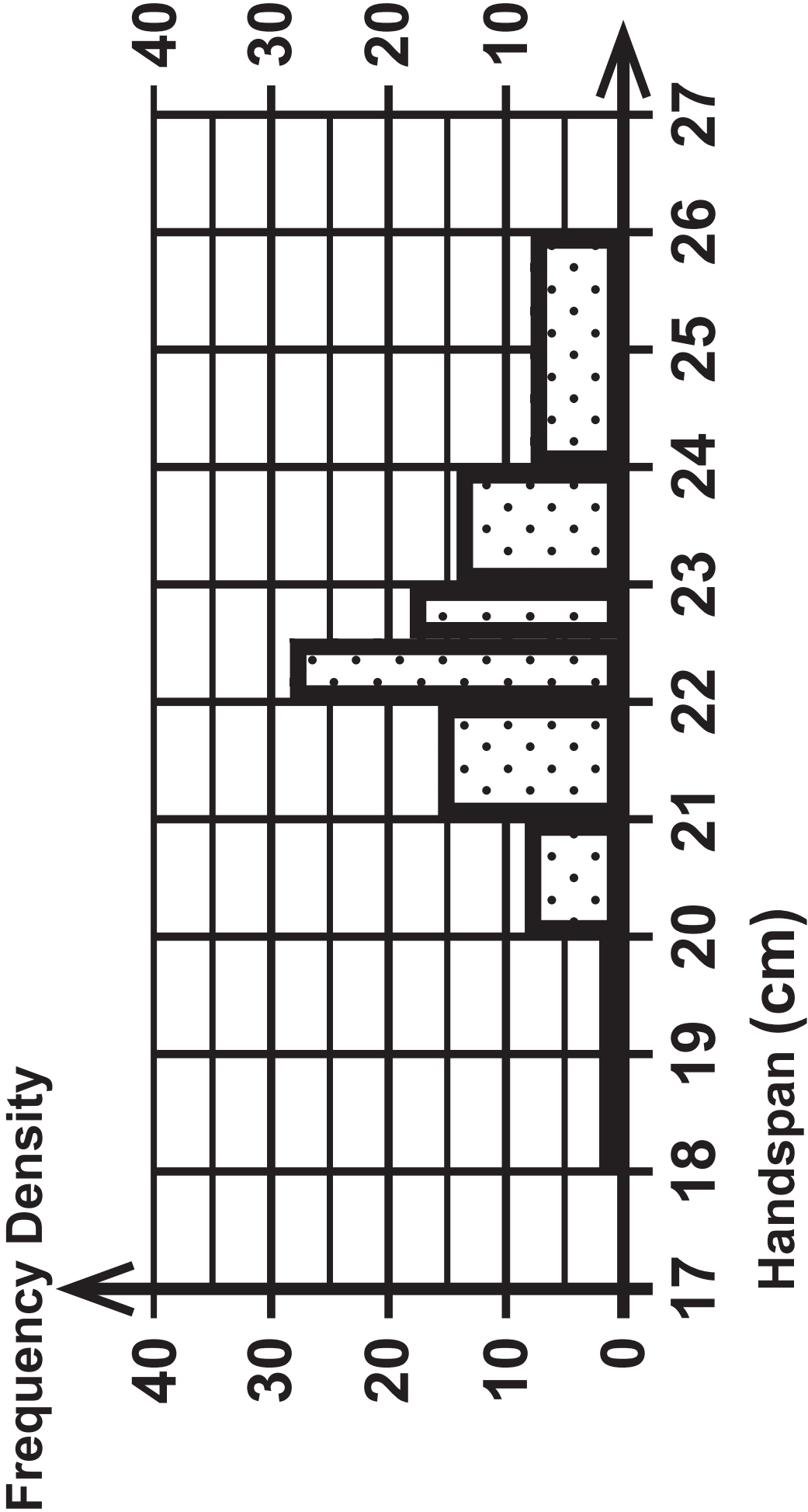
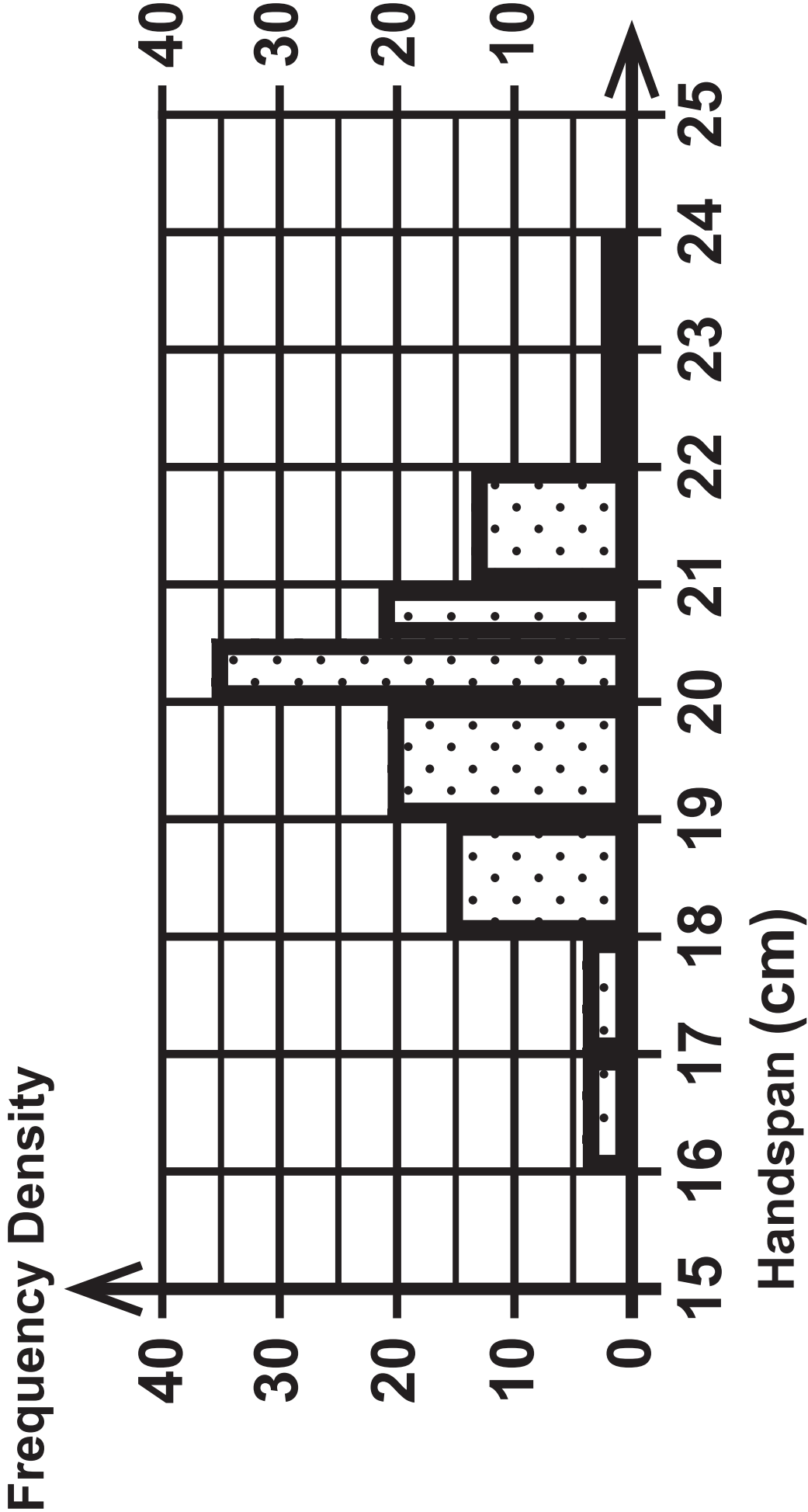


Diagram 2

Female handspans

Minimum	16.0	Mean	19.6	Standard deviation	1.33
Maximum	23.0	Median	20.0		
Number of female handspans	89				



	Male	Female
Timber rattlesnake	$y = -1804 \cdot 14 + 26 \cdot 03x$	$y = -1236 \cdot 54 + 19 \cdot 61x$
Eastern racer	$y = -363 \cdot 69 + 6 \cdot 36x$	$y = -236 \cdot 80 + 4 \cdot 62x$

Question 11(b)

Think of a number between 1 and 8

If you thought of an even number, tick box *A*.

If you thought of an odd number, answer this question.

Have you dealt with personal errands during your work day?

If yes, tick box *A*. If no, tick box *B*.

A ☐

B ☐

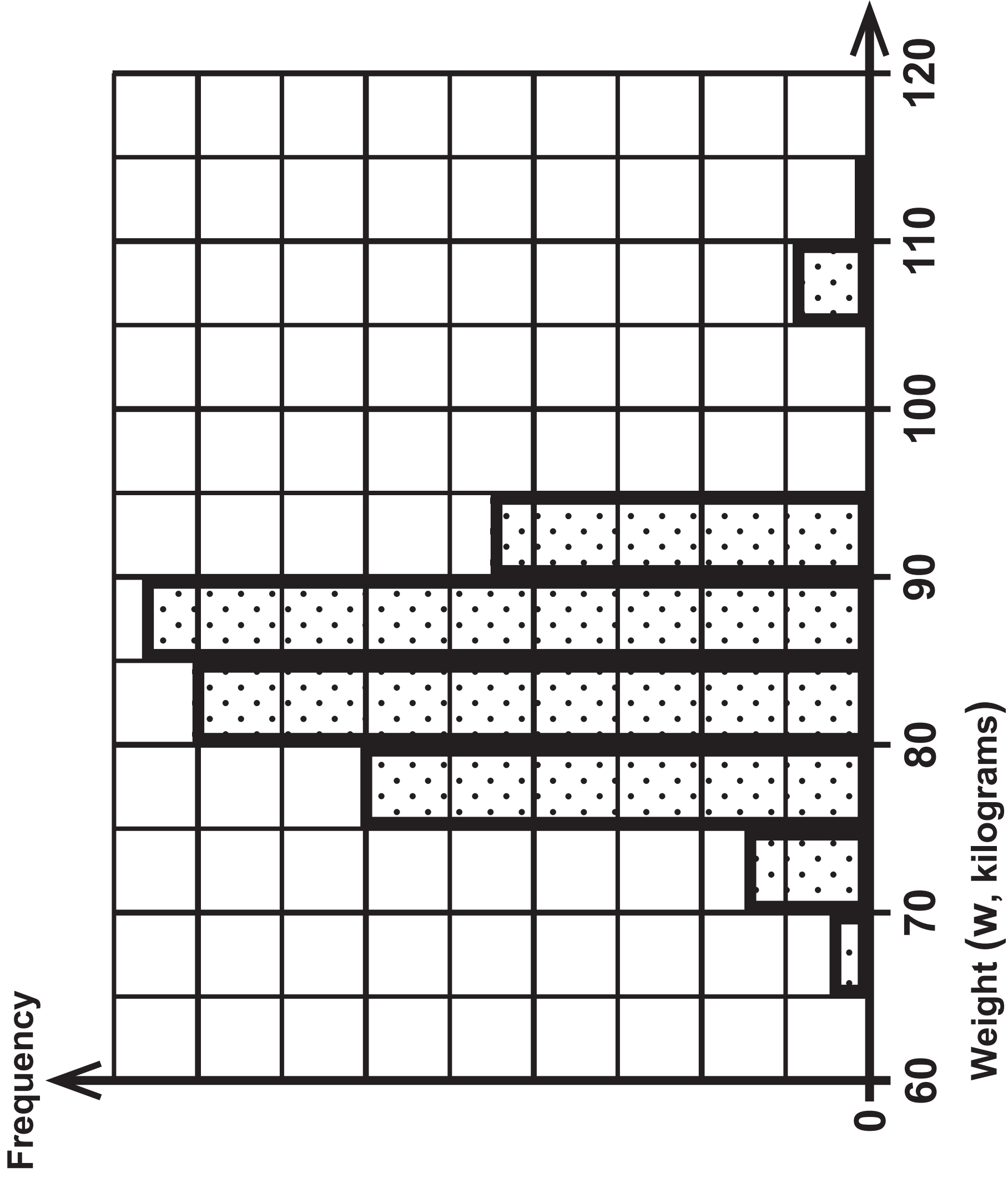
		Employment role		
		Office staff	Warehouse staff	Delivery drivers
Contract type	Full time	126	874	610
	Part time	93	615	208

Question 1

Key:

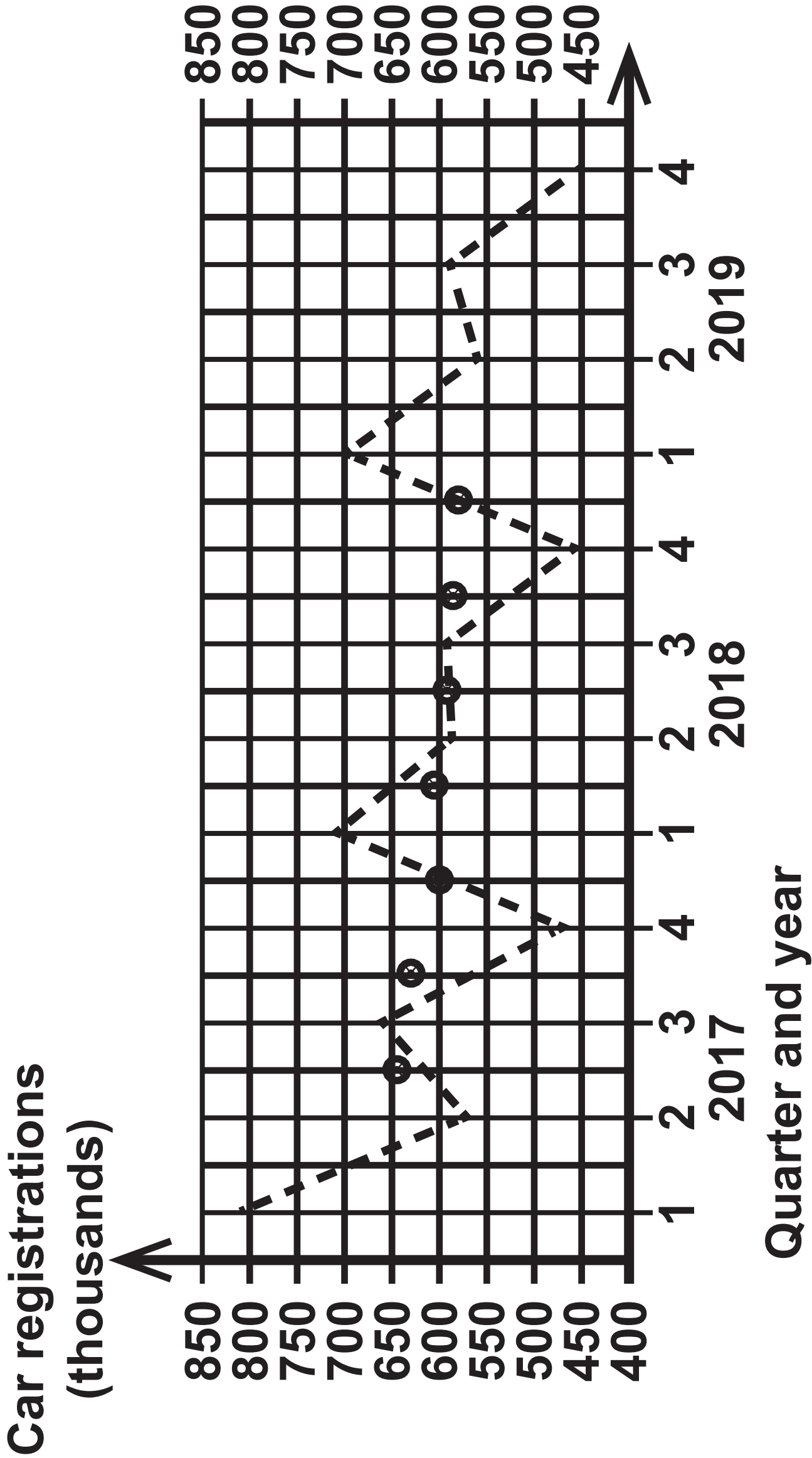
2017 season		2018 season
	1	9
	2	5 6 9
	3	5 7 9
	4	3 3 5 5 5 7
	5	0 2 2 4 6 8 8
	6	4 5 6
	7	0 2
	8	
	9	0

Questions 2(b) and 2(c)



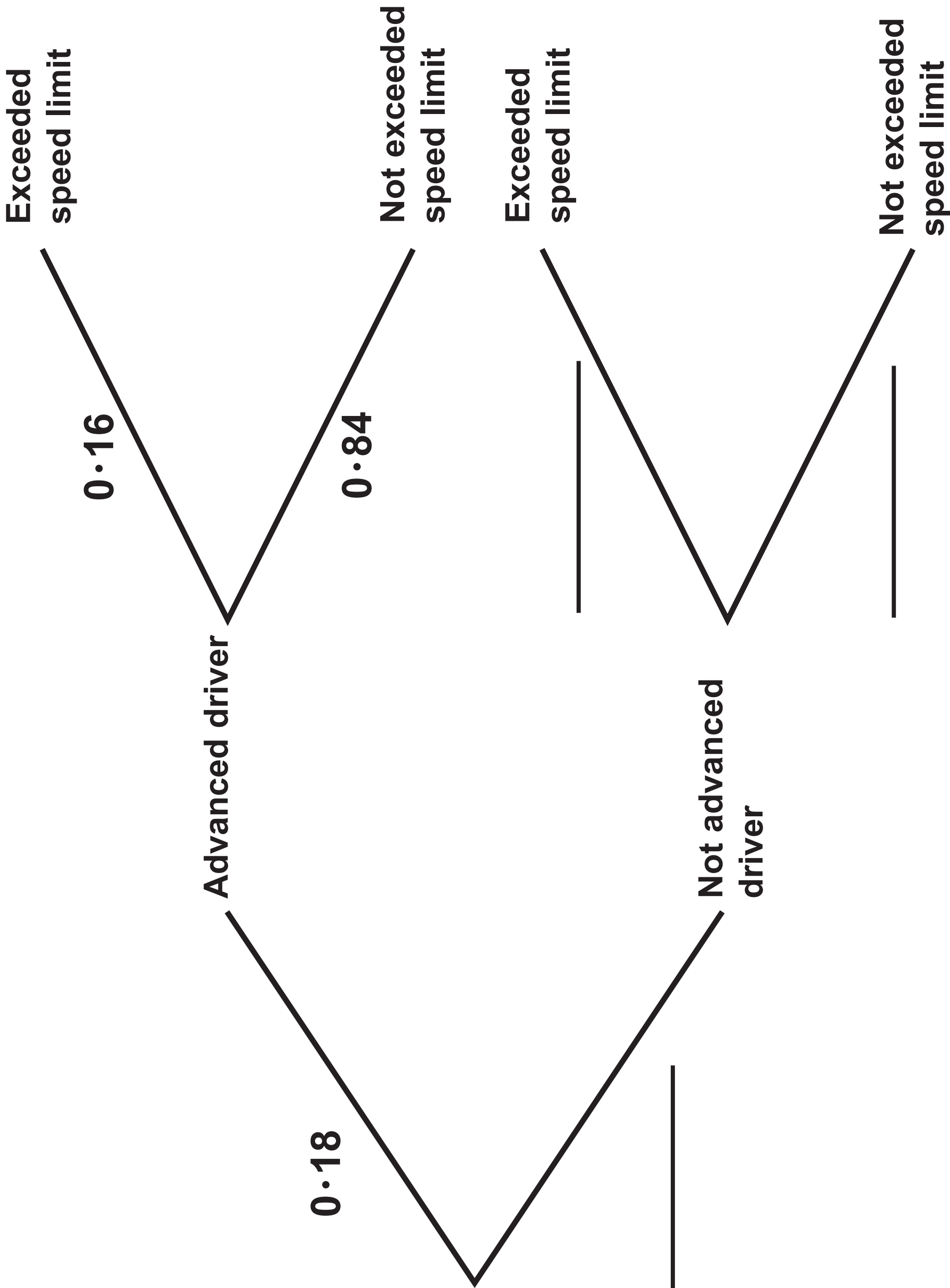
Height (h centimetres)	Frequency		
$170 < h \leq 180$	12		
$180 < h \leq 190$	146		
$190 < h \leq 200$	175		
$200 < h \leq 210$	323		
$210 < h \leq 220$	146		
$220 < h \leq 230$	8		
Total	810		

Diagram 2



Photography entry	Mrs John's rank	Mr Nowak's rank		
A	3	1		
B	6	6		
C	2	5		
D	4	3		
E	7	8		
F	1	4		
G	8	7		
H	5	2		

	Monthly average price (£)	Chain base index number
Jan	1001·4	
Feb	1014·2	101·3
Mar	988·1	97·4
Apr	986·8	99·9
May	1000·0	101·3
Jun	1071·9	



Sources

Question 2

Source: www.kaggle.com

Question 3

Source: www.gov.uk

Question 6

Source: gold.org

Question 7

Source: www.adfg.alaska.gov

Question 9

Source: mathsci.solano.edu/

Question 10

Source: www.jstor.org