

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

Statistics  
PAPER 1  
Higher Tier  
(Calculator)

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.**

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Question 1

KEY:

2 | 1 represents 21 cm

SHADE

1	7 8 9
2	1 2 3 4 5 7 8 9
3	1 1 1 2 4 5
4	
5	

KEY:

3 | 3 represents 33 cm

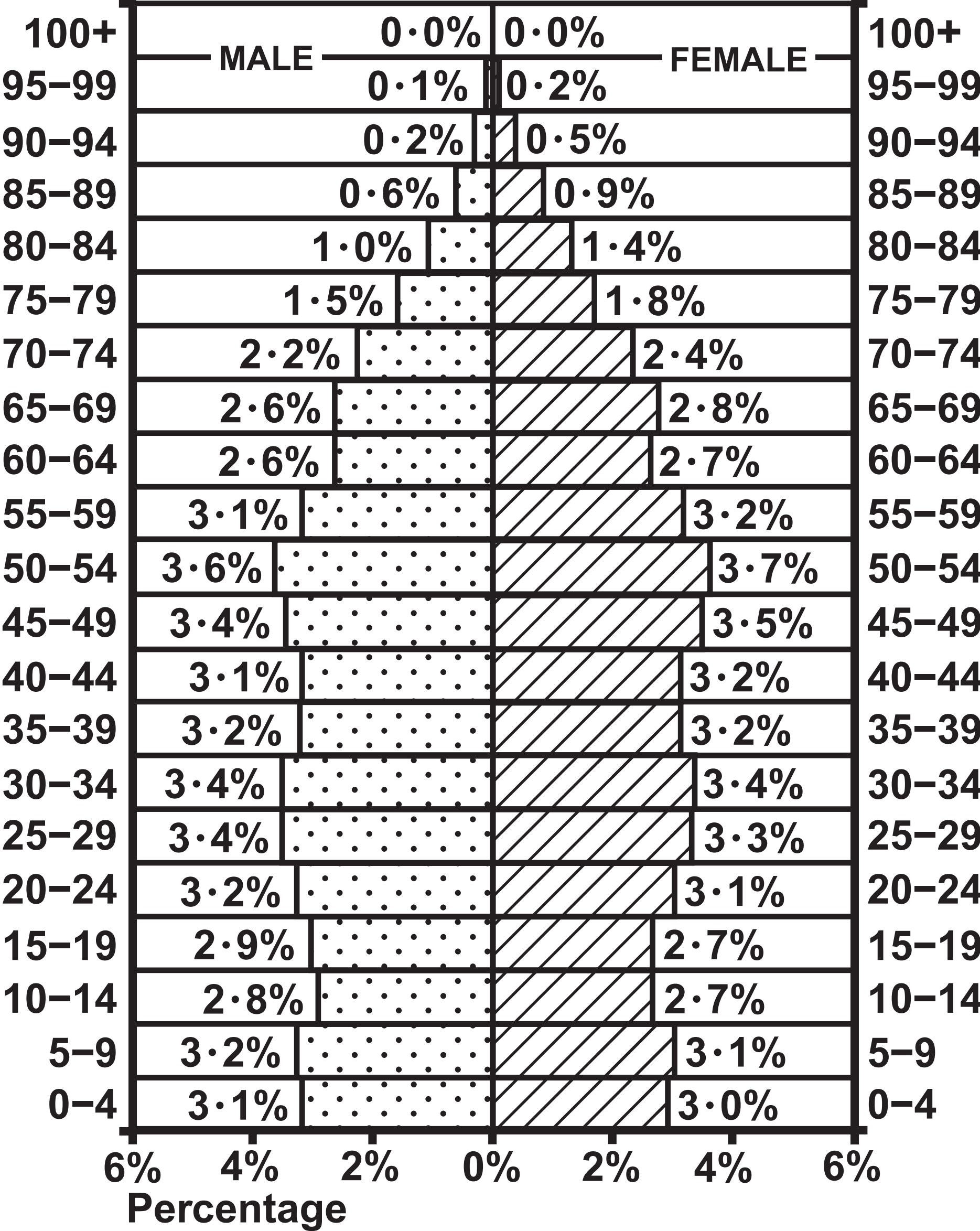
SUNLIGHT

1	
2	8 9
3	3 5 5 6 7 9
4	1 2 3 5 6 7 8 9
5	1

Question 2

United Kingdom 2017  
Population: 65 511 097

Age group



## Questions 3(a) and 3(b)

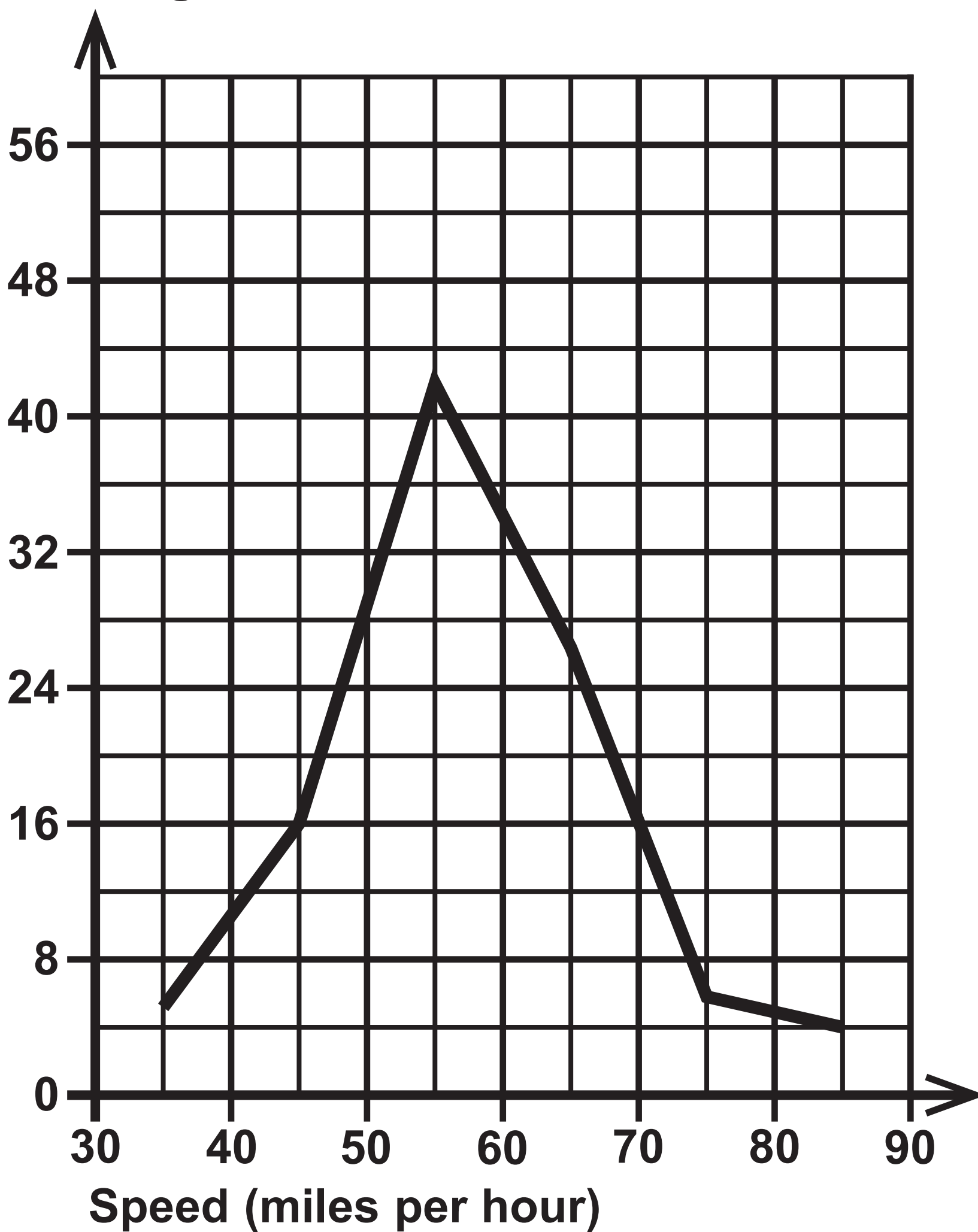
Speed (s miles per hour)	Percentage of cars	Percentage of motorcycles
$30 \leq s < 40$	3	0
$40 \leq s < 50$	18	four
$50 \leq s < 60$	42	8
$60 \leq s < 70$	27	124
$70 \leq s < 80$	6	56
$80 \leq s < 90$		8
Total	100	100

## Question 3(c)

<b>Speed (s miles per hour)</b>	<b>Percentage of motorcycles</b>
<b><math>30 \leq s &lt; 40</math></b>	<b>0</b>
<b><math>40 \leq s &lt; 50</math></b>	<b>4</b>
<b><math>50 \leq s &lt; 60</math></b>	<b>8</b>
<b><math>60 \leq s &lt; 70</math></b>	<b>24</b>
<b><math>70 \leq s &lt; 80</math></b>	<b>56</b>
<b><math>80 \leq s &lt; 90</math></b>	<b>8</b>
<b>Total</b>	<b>100</b>

## Question 3(d)

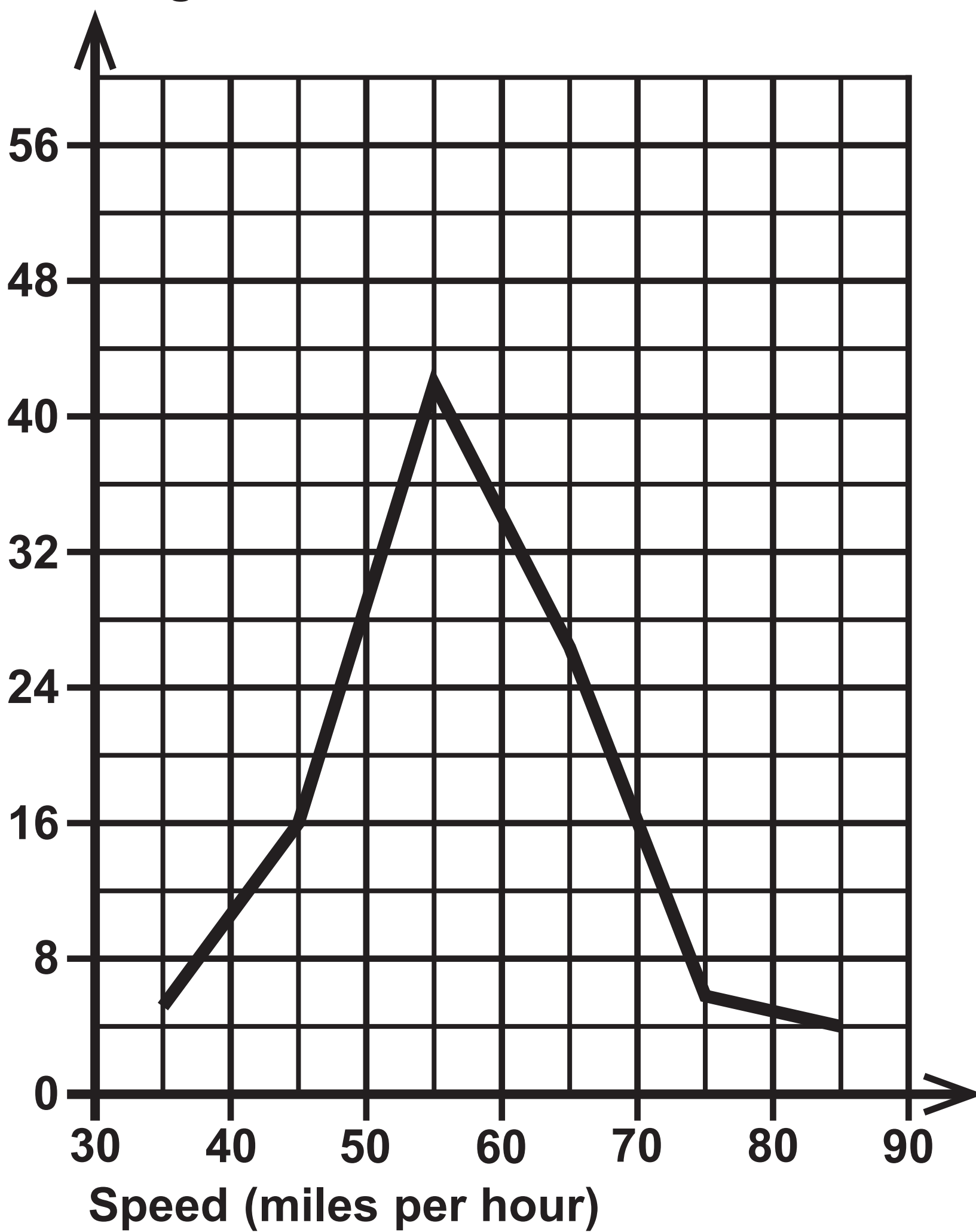
Percentage





## Question 3(d)

Percentage



### Question 4

A supermarket chain has **93** stores in the United Kingdom with a total of **4502** employees.

Each store is either a large store or a small store.

The directors of the supermarket chain are proposing to make changes to the employees' working hours.

The directors want to survey a sample of **450** employees from the total workforce in order to ask them for their views on the proposed changes.

Three possible sampling methods in order to select the employees to be in the survey are suggested.

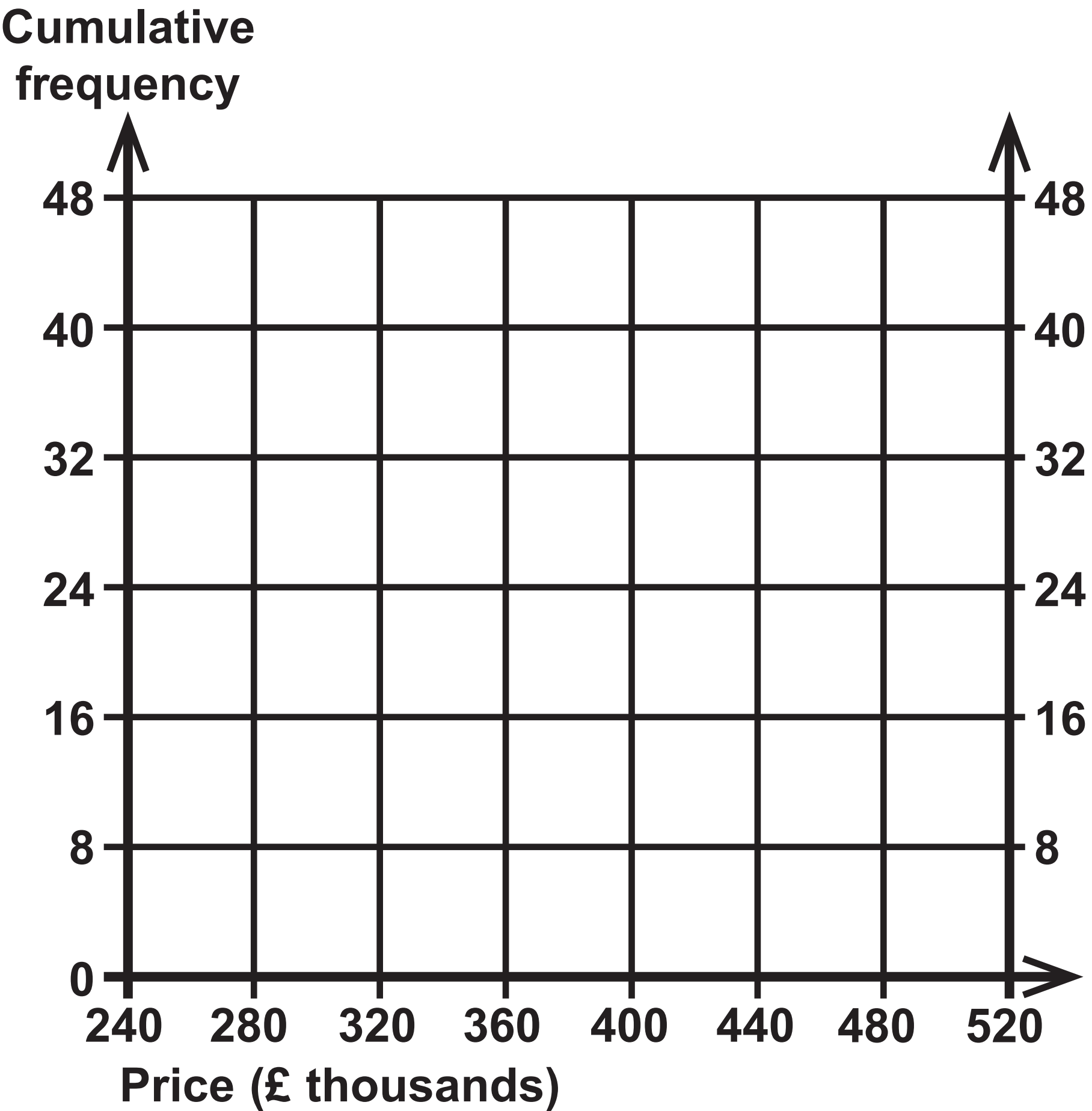
**METHOD A** The directors will choose two employees from each small store and six employees from each large store.

**METHOD B** All **4502** employees are allocated a number from **0001** to **4502**

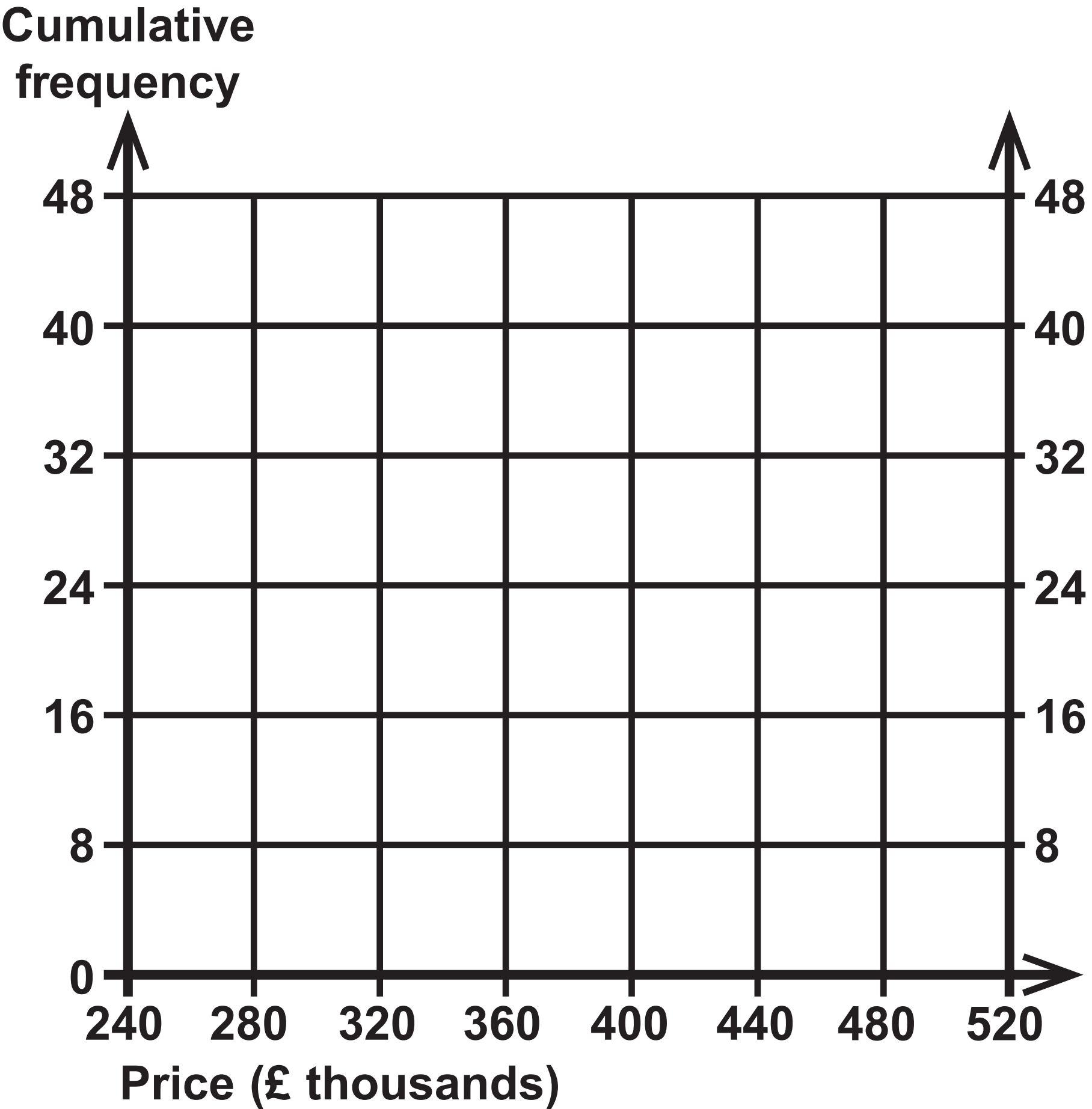
Start with number **0010** and take every **10th** employee so that the sample consists of employees with the numbers **0010, 0020, 0030, ... and 4500**

**METHOD C** Each employee in each store will be given a raffle ticket and **10%** of the number of employees in each store will be chosen at random by taking raffle tickets out of boxes, one box for each store.

Question 5



Question 5



Question 6

Team	Mean value of all players in the team (£ million)		Final position of the team	d	d <sup>2</sup>
	Value	Rank			
Arsenal FC	14·13	6	5	1	1
AFC Bournemouth	4·67	15	14	1	1
Brighton	4·21	17	17	0	0
Burnley FC	5·63	13	15	-2	4
Cardiff City	2·17	20	18	2	4
Chelsea FC	19·38	5	3	2	4
Crystal Palace	7·29	10	12	-2	4
Everton FC	10·74	7	8	-1	1

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Turn over

Question 6 continued.

Team	Mean value of all players in the team (£ million)		Final position of the team	d	d <sup>2</sup>
	Value	Rank			
Fulham FC	6·70	12	19	−7	49
Huddersfield Town	3·43	19	20	−1	1
Leicester City	8·66	8	9	−1	1
Liverpool FC	23·08	3	2	1	1
Manchester City	22·92	4	1	3	9
Manchester United	23·80	2	6	−4	16
Newcastle United	5·41	14	13		
Southampton FC	6·76	11	16		

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Turn over

Question 6 continued.

Team	Mean value of all players in the team (£ million)		Final position of the team	d	d <sup>2</sup>
	Value	Rank			
Tottenham Hotspur	24·11	1	4		
Watford FC	4·37	16	11		
West Ham United	8·37	9	10		
Wolverhampton	4·01	18	7		

Question 6

Team	Mean value of all players in the team (£ million)		Final position of the team	d	d <sup>2</sup>
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Arsenal FC	14.13	6	5	1	1
AFC Bournemouth	4.67	15	14	1	1
Brighton	4.21	17	17	0	0
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West Ham United	8·37	9	10		
Wolverhampton	4·01	18	7		

Question 7

Year	Quarter	Number of visitors (thousands)	4–point moving average (thousands)
2015	1	606	
	2	1164	
	3	1397	993·75
	4	808	1005
2016	1	651	998·25
	2	1137	1034·75
	3	1543	1070·75
	4	952	1102·25
			1198·25

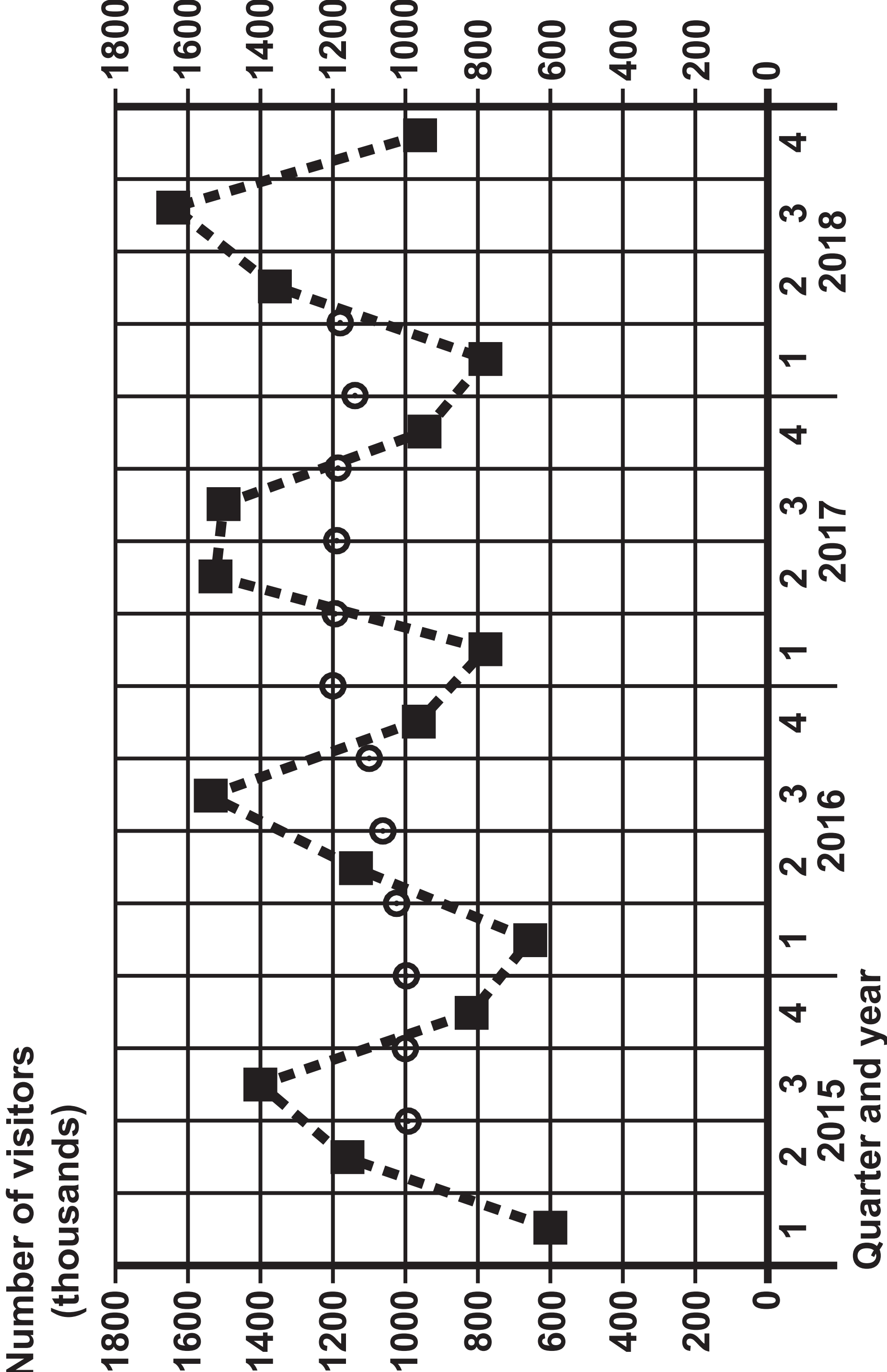
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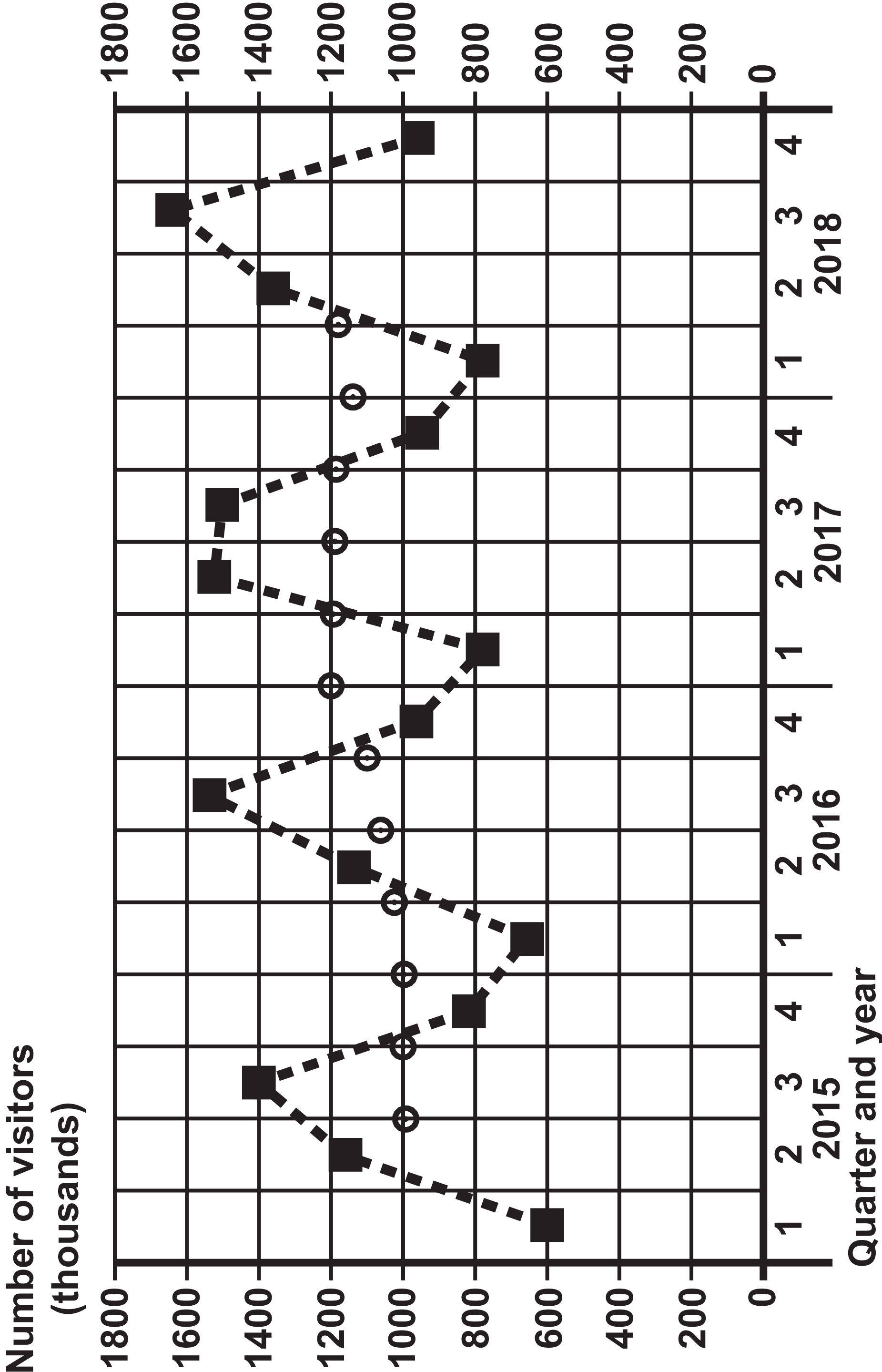
Question 7 continued.

Year	Quarter	Number of visitors (thousands)	4-point moving average (thousands)
2017	1	777	
	2	1521	1188.25
	3	1503	1186.5
	4	945	1186
2018	1	775	1146.5
	2	1363	1179.25
	3	1634	1181.75
	4	955	

Questions 7(b) and 7(c)



Questions 7(b) and 7(c)



Question 8

Year	Chain base index numbers
January 2015	
January 2016	107·76
January 2017	104·76
January 2018	104·32
January 2019	101·73

Question 10

Test	Huan’s score	Test mean	Test standard deviation
Numeracy	49	42	3·5
Literacy	50	40	7·5



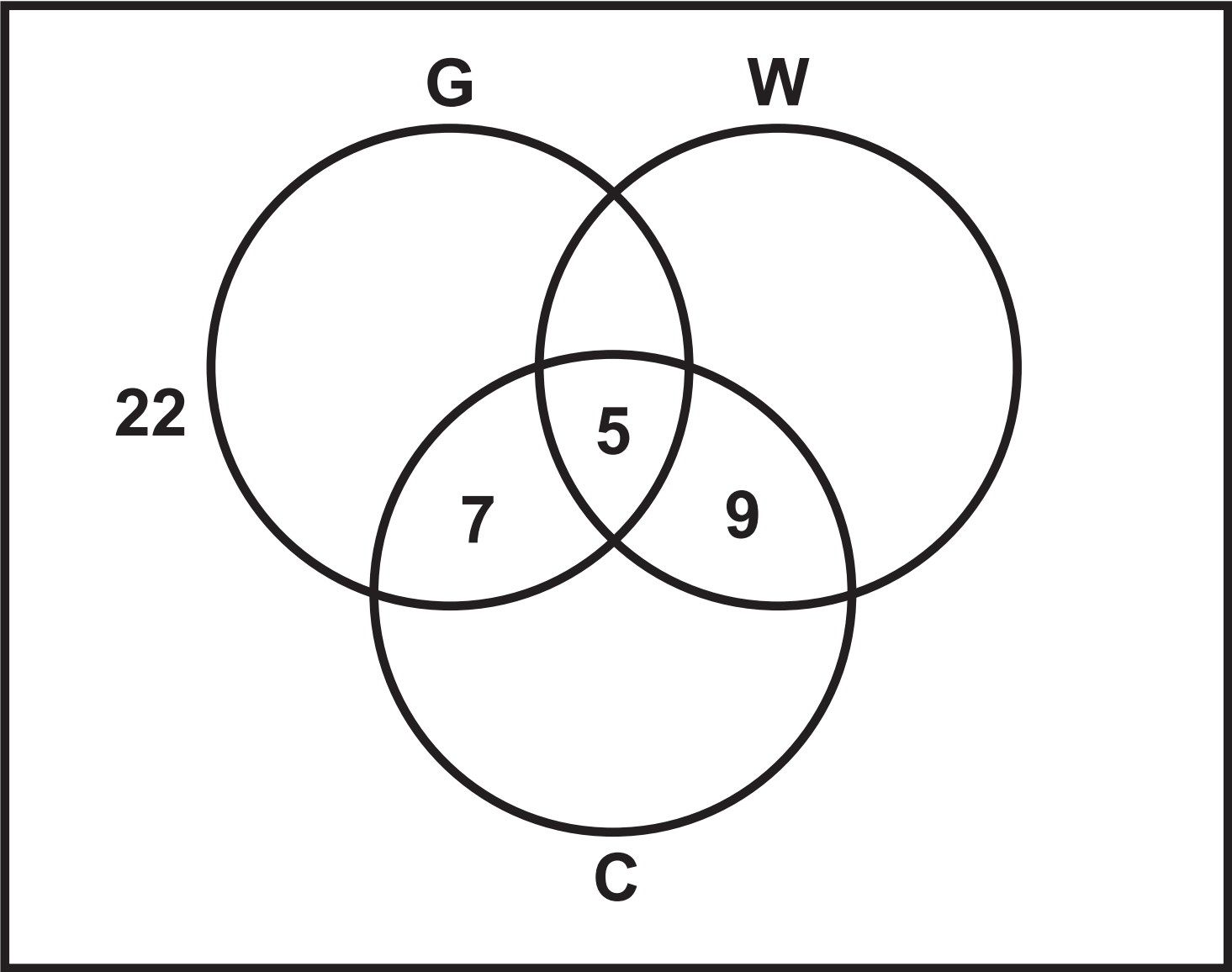
Question 11

Time taken (t seconds)	Frequency (f)
$50 < t \leq 60$	1
$60 < t \leq 65$	5
$65 < t \leq 70$	15
$70 < t \leq 75$	17
$75 < t \leq 80$	12

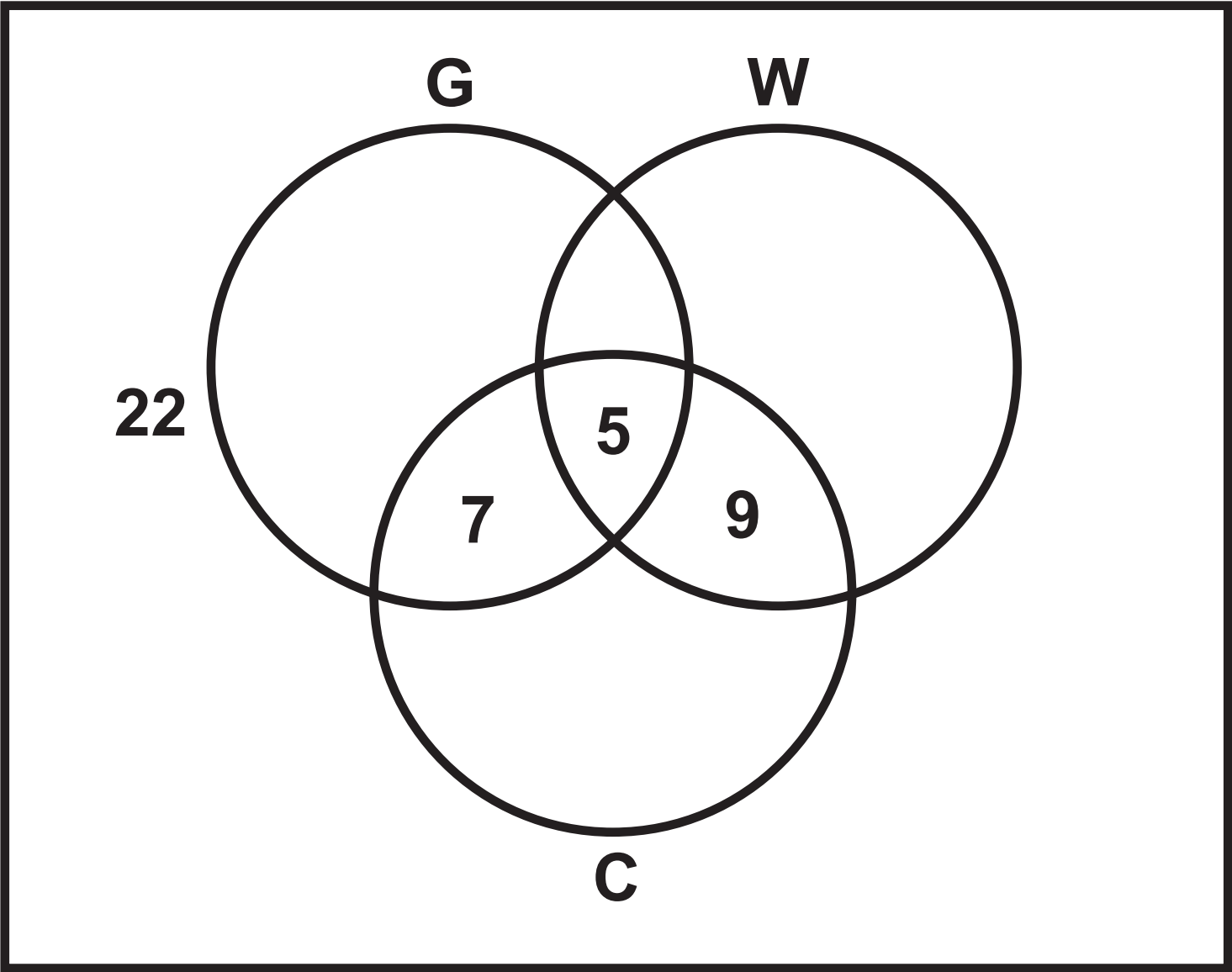
Question 13

Year	Percentage profit (%)	
	Shop A	Shop B
2015	1·7	
2016	1·8	0·9
2017	2·3	1·4
2018	2·9	1·1
2019	3·5	5·7

Question 14



Question 14



## Sources

### Question 2

(Source: [Populationpyramid.net](http://Populationpyramid.net))

### Question 2

(Source: Office for National Statistics)

### Question 5

(Source: Adapted from [rightmove.co.uk](http://rightmove.co.uk))

### Question 6

(Source: [www.transfermarket.com](http://www.transfermarket.com))

### Question 7

(Source: Office for National Statistics)

### Question 8

(Source: [landregistry.data.gov.uk](http://landregistry.data.gov.uk))

### Question 13

(Source: adapted from [www.tescopl.com/investors/reports](http://www.tescopl.com/investors/reports))