

**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.**

<b>Surname</b>										
<b>Other names</b>										
<b>Centre Number</b>										
<b>Candidate Number</b>										

## **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

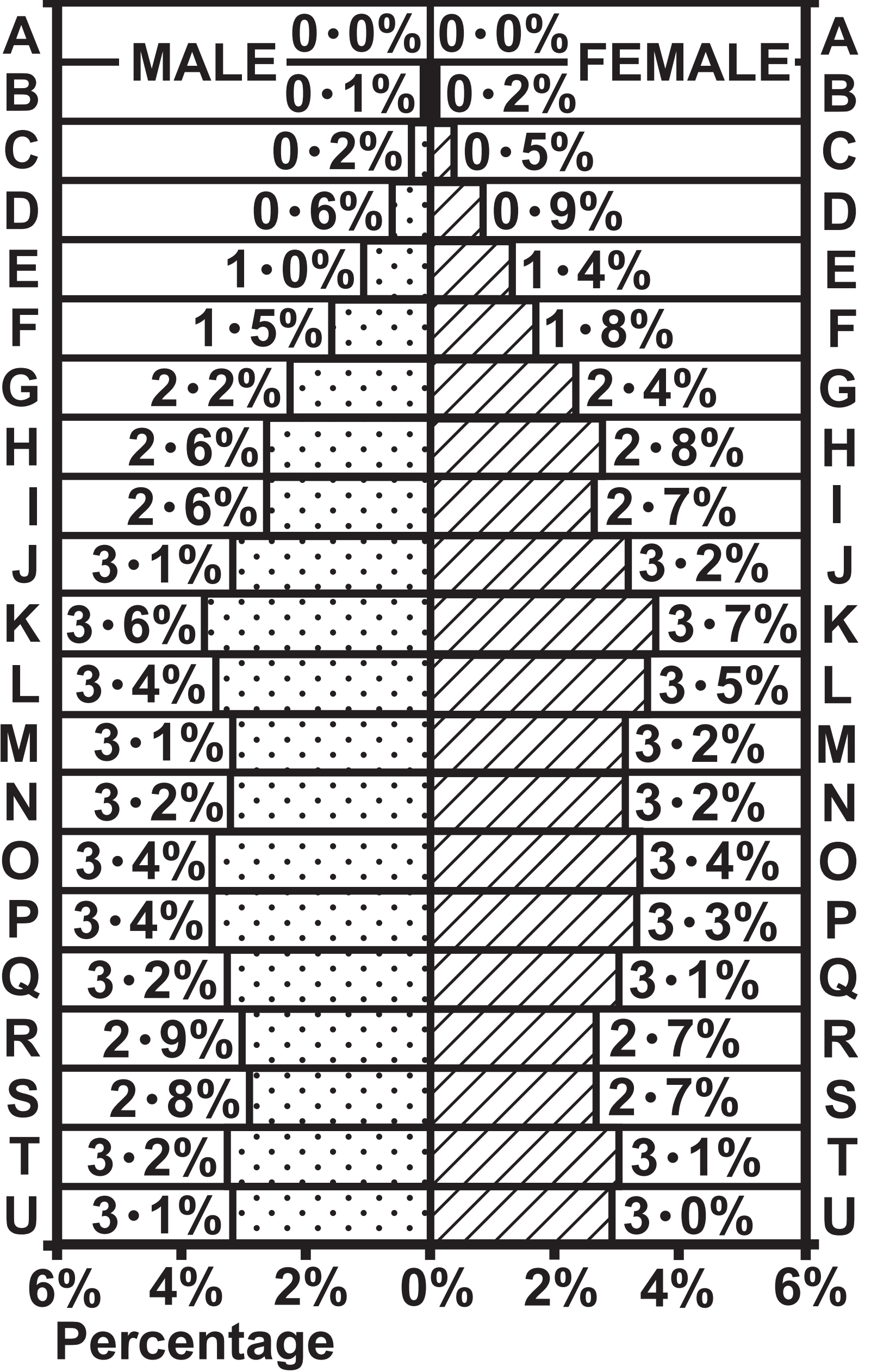
## Question 2 – Key

**Key:**

<b>A</b>	<b>100+</b>
<b>B</b>	<b>95–99</b>
<b>C</b>	<b>90–94</b>
<b>D</b>	<b>85–89</b>
<b>E</b>	<b>80–84</b>
<b>F</b>	<b>75–79</b>
<b>G</b>	<b>70–74</b>
<b>H</b>	<b>65–69</b>
<b>I</b>	<b>60–64</b>
<b>J</b>	<b>55–59</b>
<b>K</b>	<b>50–54</b>
<b>L</b>	<b>45–49</b>
<b>M</b>	<b>40–44</b>
<b>N</b>	<b>35–39</b>
<b>O</b>	<b>30–34</b>
<b>P</b>	<b>25–29</b>
<b>Q</b>	<b>20–24</b>
<b>R</b>	<b>15–19</b>
<b>S</b>	<b>10–14</b>
<b>T</b>	<b>5–9</b>
<b>U</b>	<b>0–4</b>

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

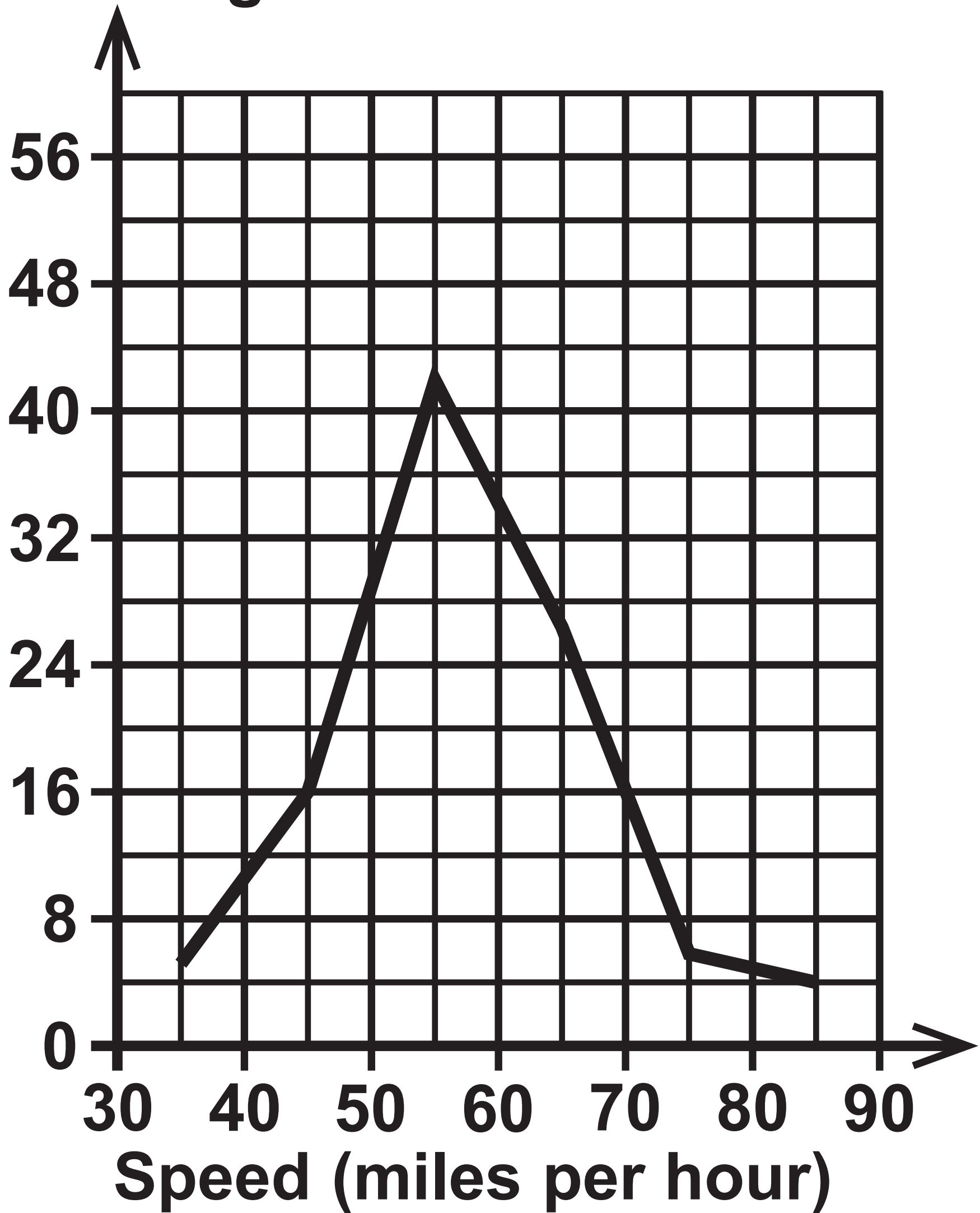


## Question 3(c)

<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>

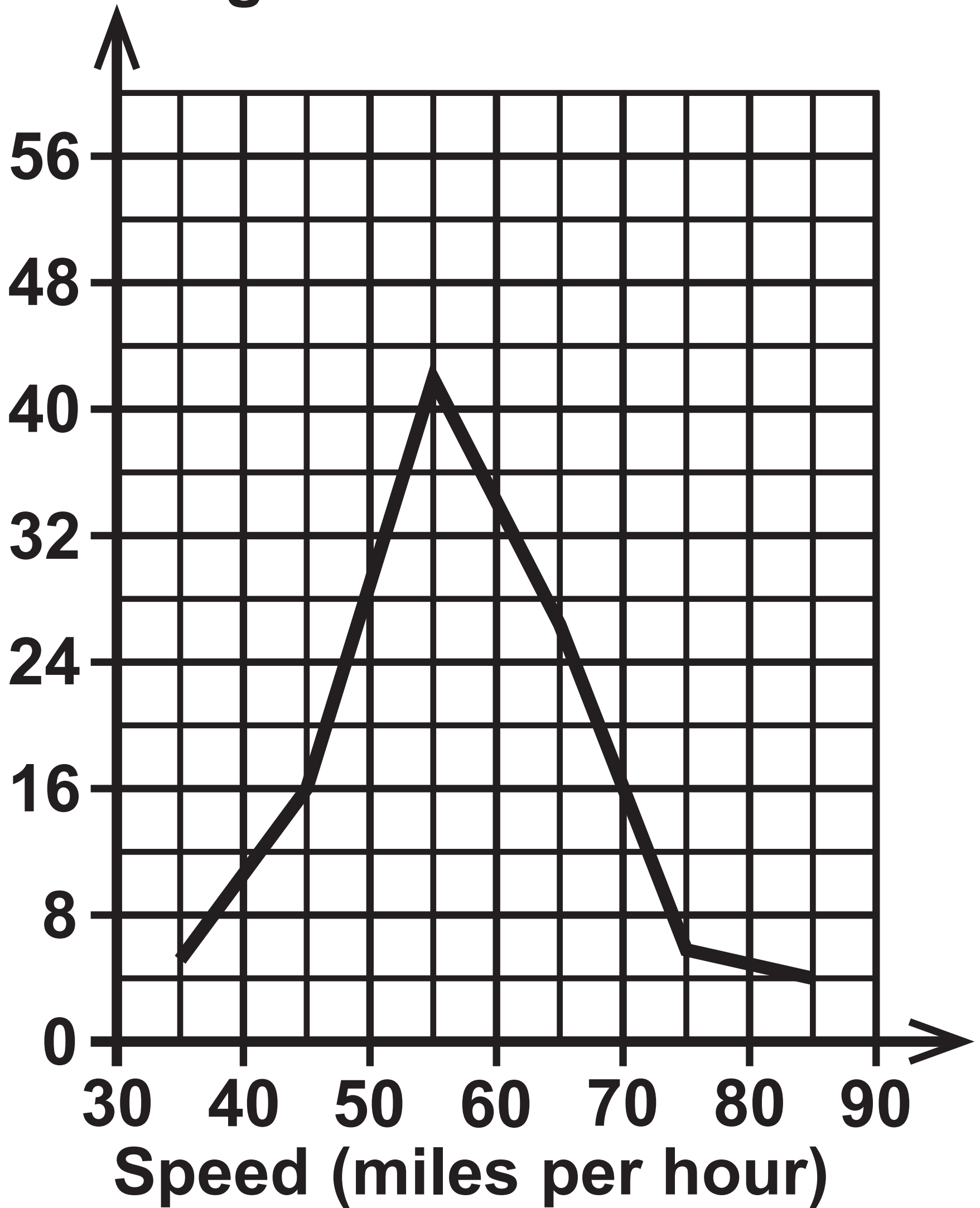
## Question 3(d)

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 on the next page.**

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**Question 4 continued.**

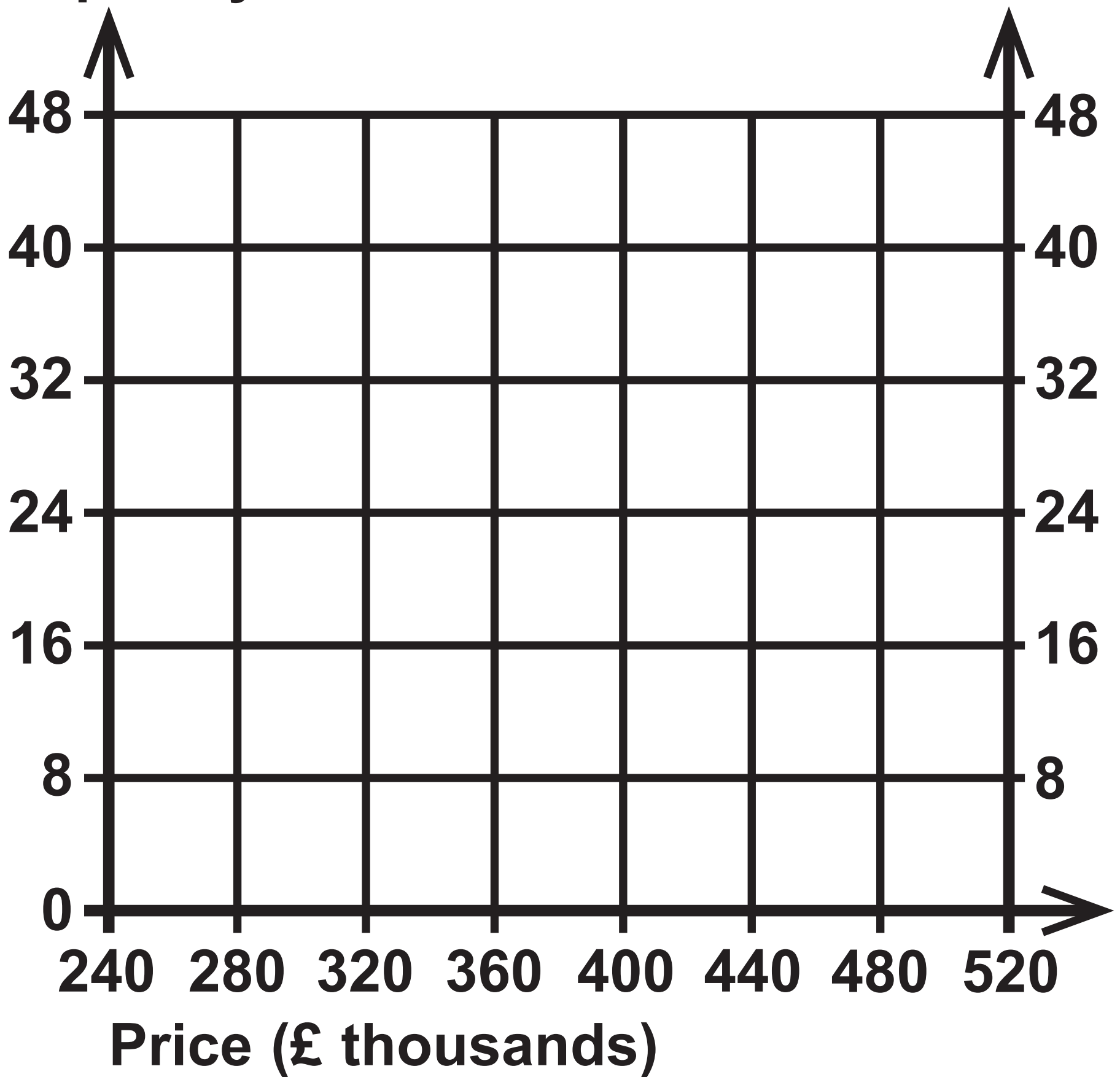
**METHOD A** The directors will choose two employees from each small store and six employees from each large store.

**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.

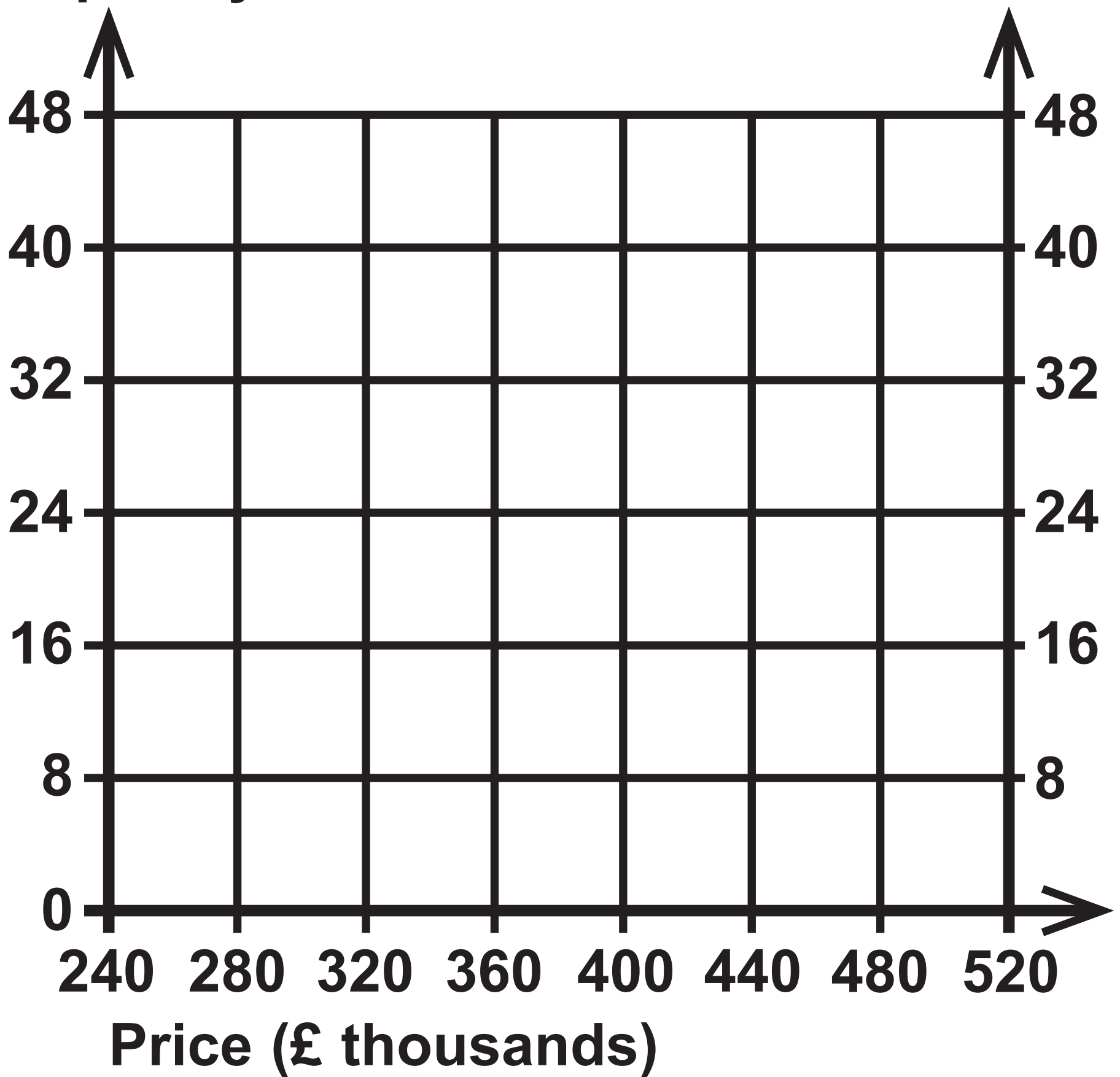
## Question 5

**Cumulative  
frequency**



# Question 5

**Cumulative  
frequency**



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



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		

(continued on the next page)

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		

Team	Mean value of all players in the team (£ million)		Final position of the team	d	d <sup>2</sup>
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Watford FC	4·37	16	11		
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

(continued on the next page)

Turn over

Question 7 continued.

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

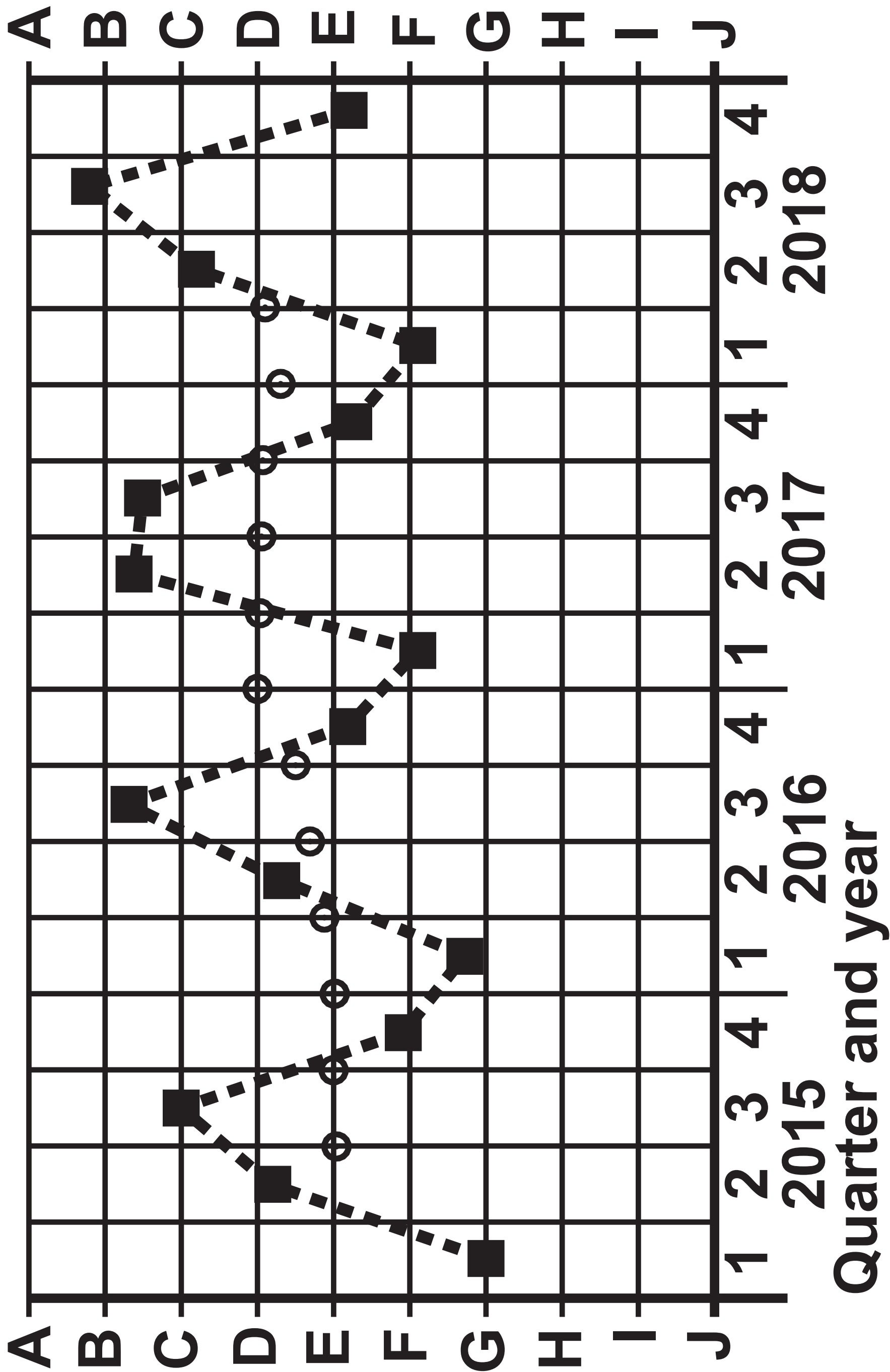
Questions 7(b) and 7(c) – Key

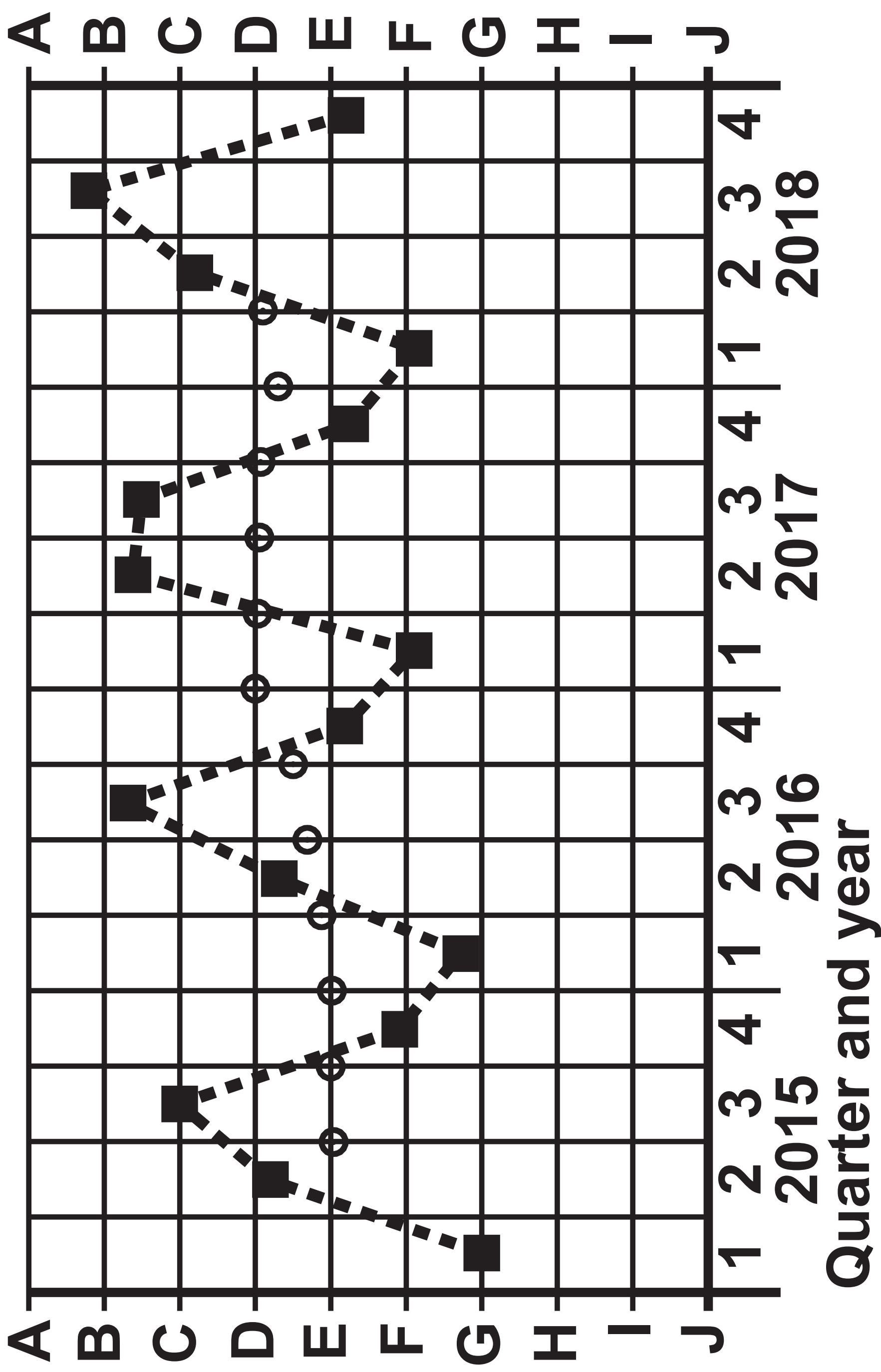
**Key:**

<b>A</b>	<b>1800</b>
<b>B</b>	<b>1600</b>
<b>C</b>	<b>1400</b>
<b>D</b>	<b>1200</b>
<b>E</b>	<b>1000</b>
<b>F</b>	<b>800</b>
<b>G</b>	<b>600</b>
<b>H</b>	<b>400</b>
<b>I</b>	<b>200</b>
<b>J</b>	<b>0</b>



Number of visitors (thousands)





## Question 8

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

Test	Huan's score	Test mean	Test standard deviation
Numeracy	49	42	3.5
Literacy	50	40	7.5

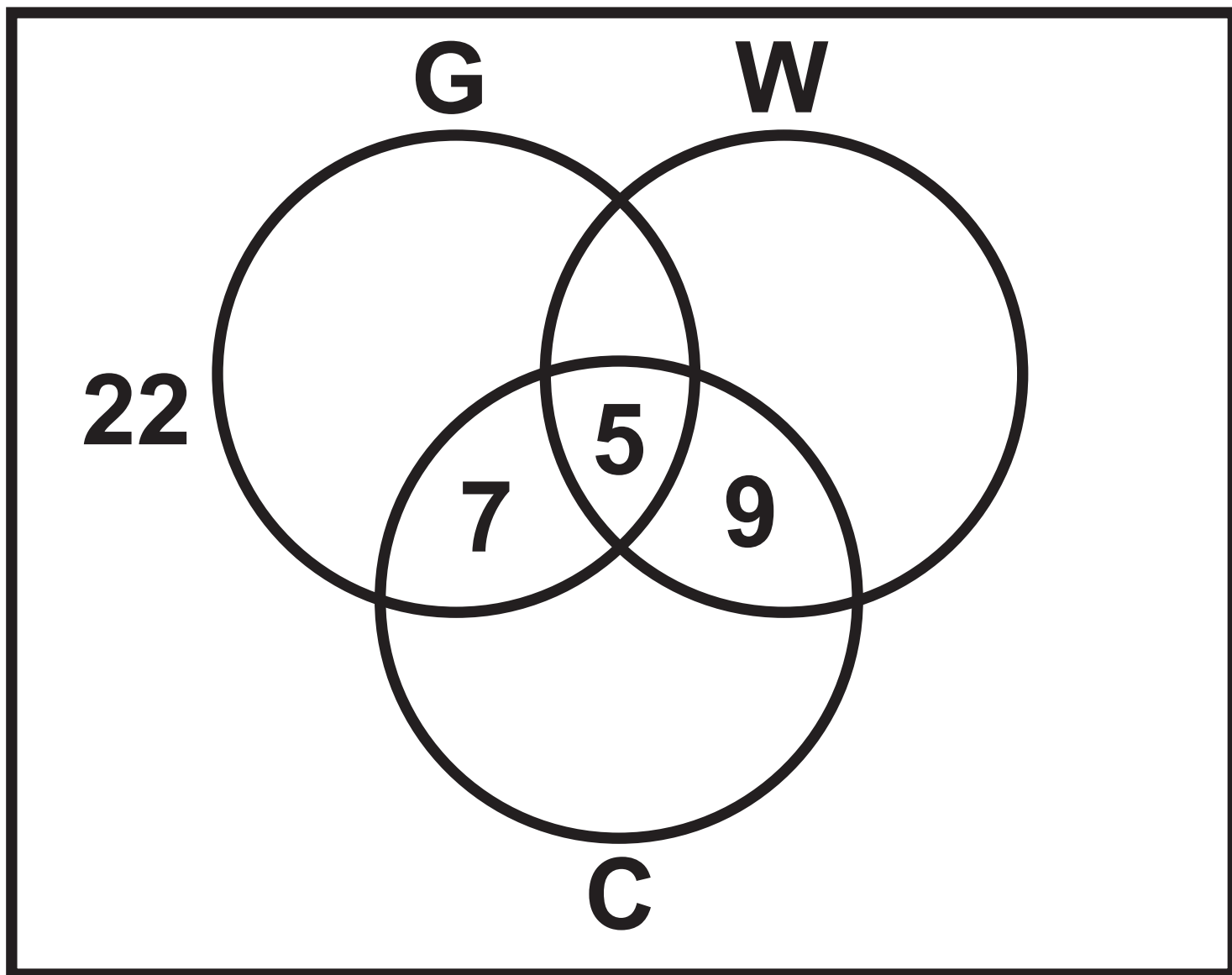
## Question 11

<b>Time taken (t seconds)</b>	<b>Frequency (f)</b>
<b><math>50 &lt; t \leq 60</math></b>	<b>1</b>
<b><math>60 &lt; t \leq 65</math></b>	<b>5</b>
<b><math>65 &lt; t \leq 70</math></b>	<b>15</b>
<b><math>70 &lt; t \leq 75</math></b>	<b>17</b>
<b><math>75 &lt; t \leq 80</math></b>	<b>12</b>

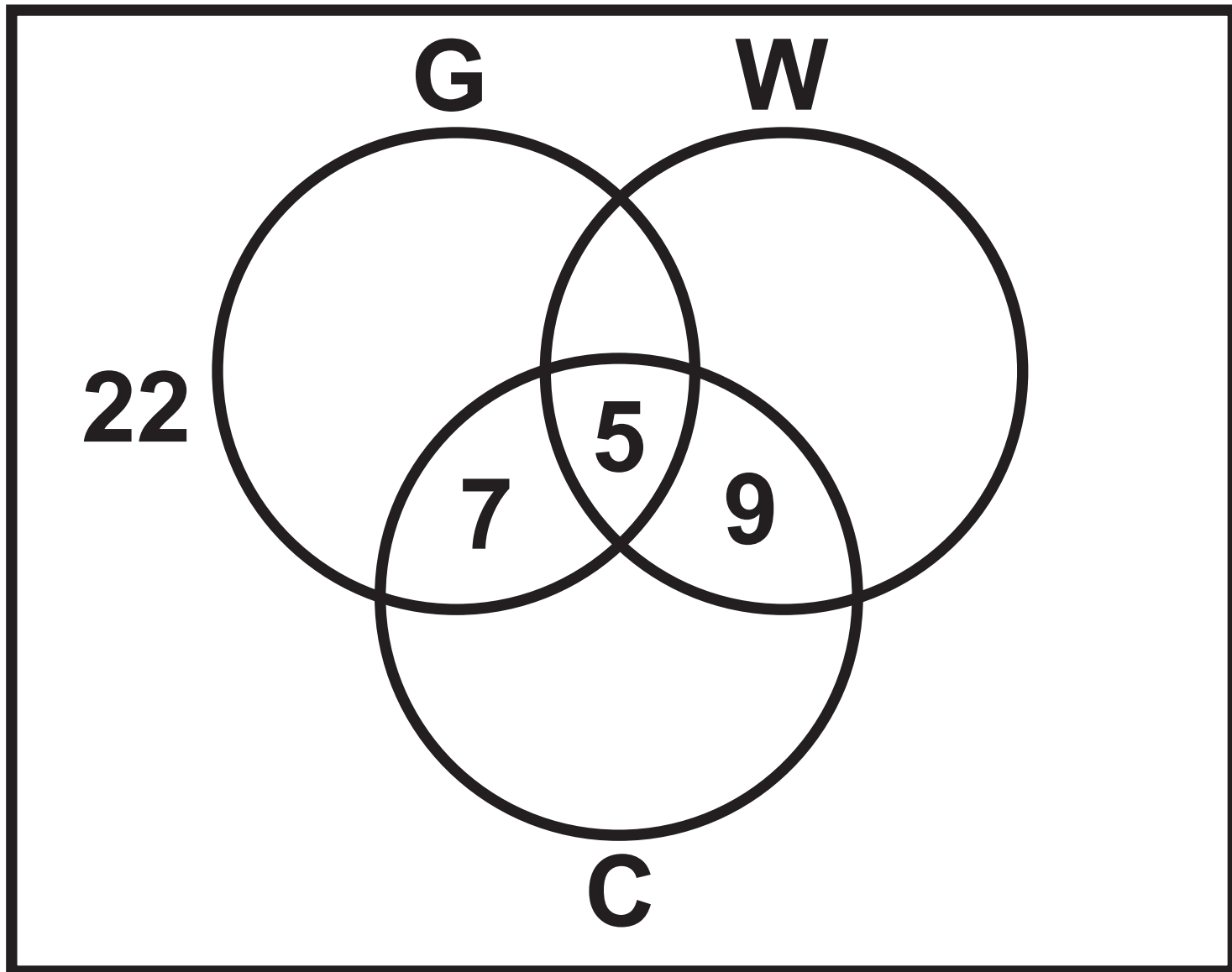
## Question 13

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))**