



THIRD SPACE  
LEARNING

# GCSE Exam Questions

Frequency Graph | Statistics

## GCSE Exam Questions: Frequency Graph

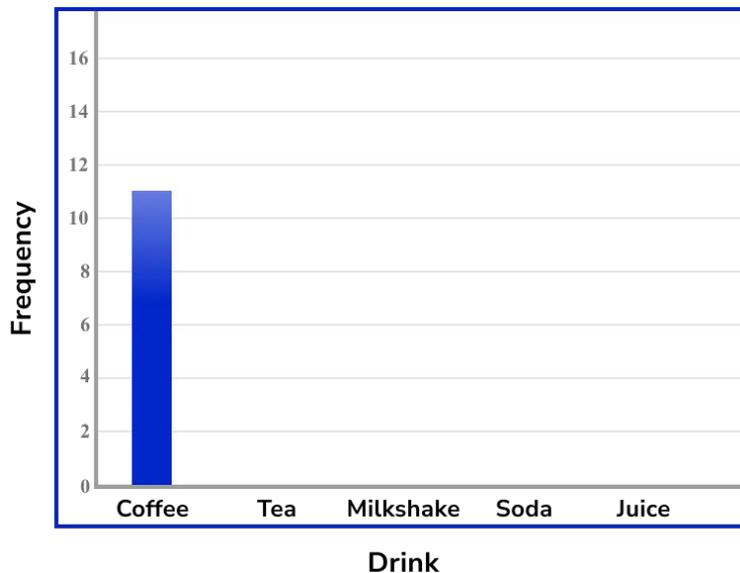
1) Libby works in a cafe.

One day she collects some data on the drinks chosen by the customers.

The table shows the results.

Drinks	Frequency
Coffee	11
Tea	14
Milkshake	3
Soda	9
Juice	4

(a) Complete the bar chart to show Libby's results.



(2)

(b) How many more Teas than Sodas were chosen?

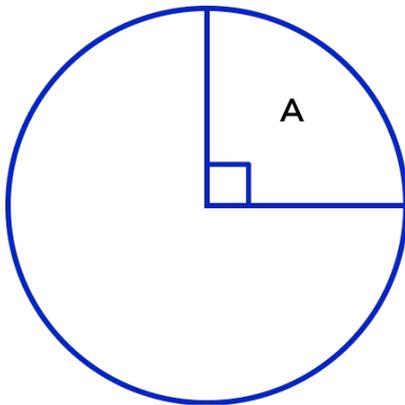
(1)

(3 marks)

## GCSE Exam Questions: Frequency Graph

2) In a survey on breakfast cereal, 180 people were asked to state which brand they preferred.

The pie chart showing the results has started to be drawn.



(a) How many people preferred Brand A?

-----  
(2)

(b) Here is a table showing the other brands.

Complete the table.

Brand	Frequency	Angle
B	18	36°
C	40	
D		110°
E		

-----  
(3)

(c) Complete the pie chart.

-----  
(2)

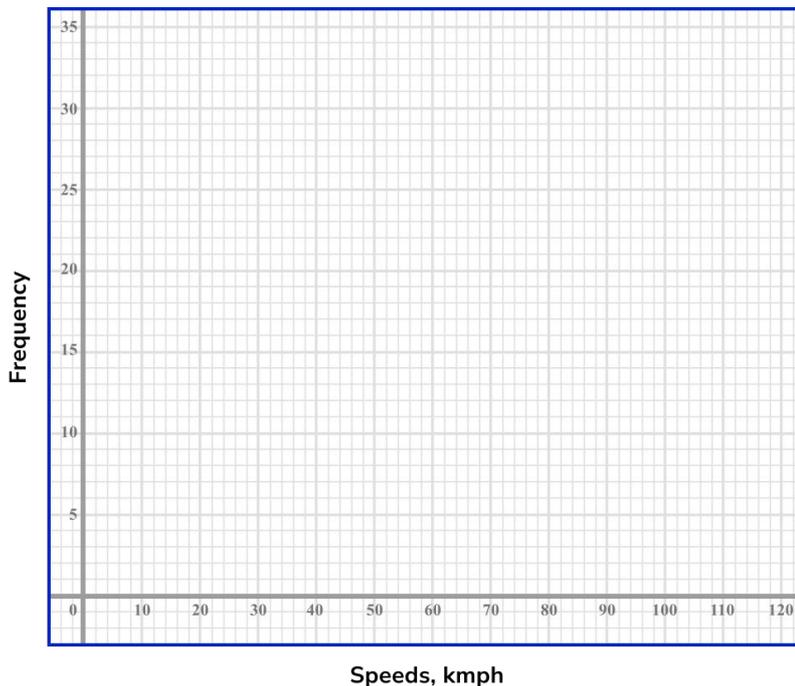
**(7 marks)**

## GCSE Exam Questions: Frequency Graph

3) The frequency table shows some information about the speeds of 100 vehicles.

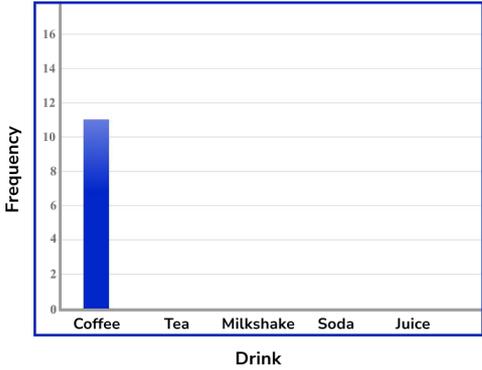
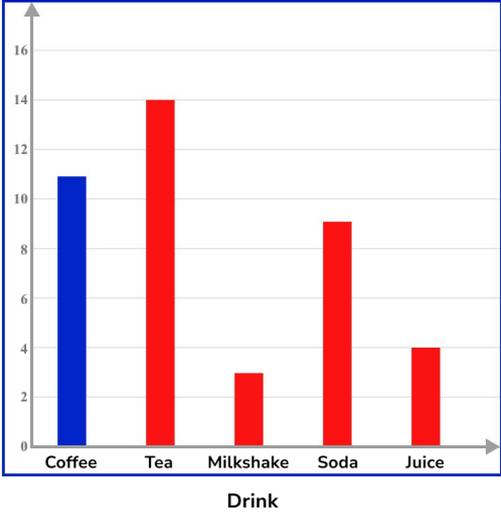
Speed, $x$ (kmph)	Frequency
$0 < x \leq 20$	2
$20 < x \leq 40$	24
$40 < x \leq 60$	26
$60 < x \leq 80$	30
$80 < x \leq 100$	13
$100 < x \leq 120$	5

On the grid, draw a frequency polygon for the information in the table.

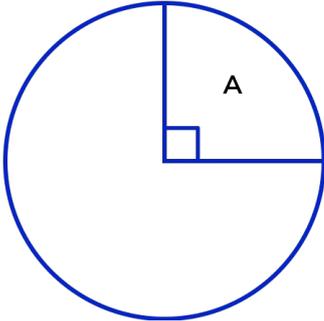
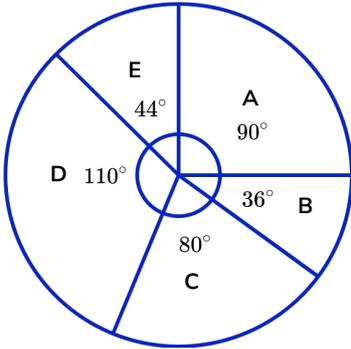


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(2)

# GCSE Exam Questions: Frequency Graph Answers

	Question	Answer	Marks												
<p>1)</p> <p>Libby works in a cafe. One day she collects some data on the drinks chosen by the customers. The table shows the results.</p> <table border="1" data-bbox="225 521 707 828"> <thead> <tr> <th>Drinks</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Coffee</td> <td>11</td> </tr> <tr> <td>Tea</td> <td>14</td> </tr> <tr> <td>Milkshake</td> <td>3</td> </tr> <tr> <td>Soda</td> <td>9</td> </tr> <tr> <td>Juice</td> <td>4</td> </tr> </tbody> </table> <p>(a) Complete the bar chart to show Libby's results.</p> 	Drinks	Frequency	Coffee	11	Tea	14	Milkshake	3	Soda	9	Juice	4	<p>(a)</p>  <p>Minimum 2 correct bars (1) All 4 correct bars (1)</p>		
Drinks	Frequency														
Coffee	11														
Tea	14														
Milkshake	3														
Soda	9														
Juice	4														
<p>(b)</p>	<p>How many <b>more</b> Teas than Sodas were chosen?</p>	<p>(b) <math>14 - 9 = 5</math></p>	<p>(1)</p>												

# GCSE Exam Questions: Frequency Graph Answers

	Question	Answer	Marks																														
2)	<p>In a survey on breakfast cereal, 180 people were asked to state which brand they preferred.</p> <p>The pie chart showing the results has started to be drawn.</p> 																																
(a)	<p>How many people preferred Brand A?</p>	<p>(a) <math>180 \div 4</math> oe</p> <p>45 people</p>	<p>(1)</p> <p>(1)</p>																														
(b)	<p>Here is a table showing the other brands.</p> <table border="1" data-bbox="193 1292 727 1534"> <thead> <tr> <th>Brand</th> <th>Frequency</th> <th>Angle</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>18</td> <td>36°</td> </tr> <tr> <td>C</td> <td>40</td> <td></td> </tr> <tr> <td>D</td> <td></td> <td>110°</td> </tr> <tr> <td>E</td> <td></td> <td></td> </tr> </tbody> </table> <p>Complete the table.</p>	Brand	Frequency	Angle	B	18	36°	C	40		D		110°	E			<p>(b)</p> <table border="1" data-bbox="876 1220 1414 1460"> <thead> <tr> <th>Brand</th> <th>Frequency</th> <th>Angle</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>18</td> <td>36°</td> </tr> <tr> <td>C</td> <td>40</td> <td>80°</td> </tr> <tr> <td>D</td> <td>55</td> <td>110°</td> </tr> <tr> <td>E</td> <td>22</td> <td>44°</td> </tr> </tbody> </table> <p>Row C correct Row D correct Row E correct</p>	Brand	Frequency	Angle	B	18	36°	C	40	80°	D	55	110°	E	22	44°	<p>(1)</p> <p>(1)</p> <p>(1)</p>
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(c)	<p>Complete the pie chart.</p>	<p>(c)</p>  <p>For one correct sector with label For ALL correct sectors and labels</p>	<p>(1)</p> <p>(1)</p>																														



# Where to go next?

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