

Name:

Exam Style Questions

Misleading Graphs



Equipment needed: Ruler, Pen, Protractor, Calculator

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Video 160a



Answers and Video Solutions



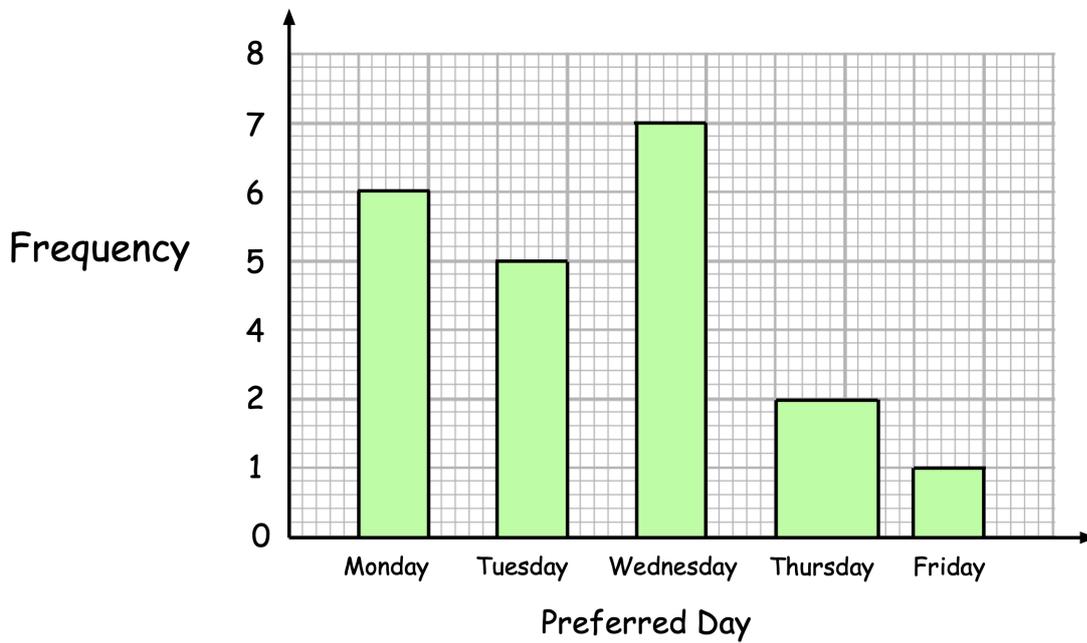
1. Miss Kennedy asked a group of students on which day they wanted a new club to take place.



The table shows the results.

Day	Frequency
Monday	6
Tuesday	5
Wednesday	7
Thursday	2
Friday	1

Miss Kennedy drew this bar chart to show the preferred day.



Write down **two** things that are wrong with the bar chart.

Mistake 1

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Mistake 2

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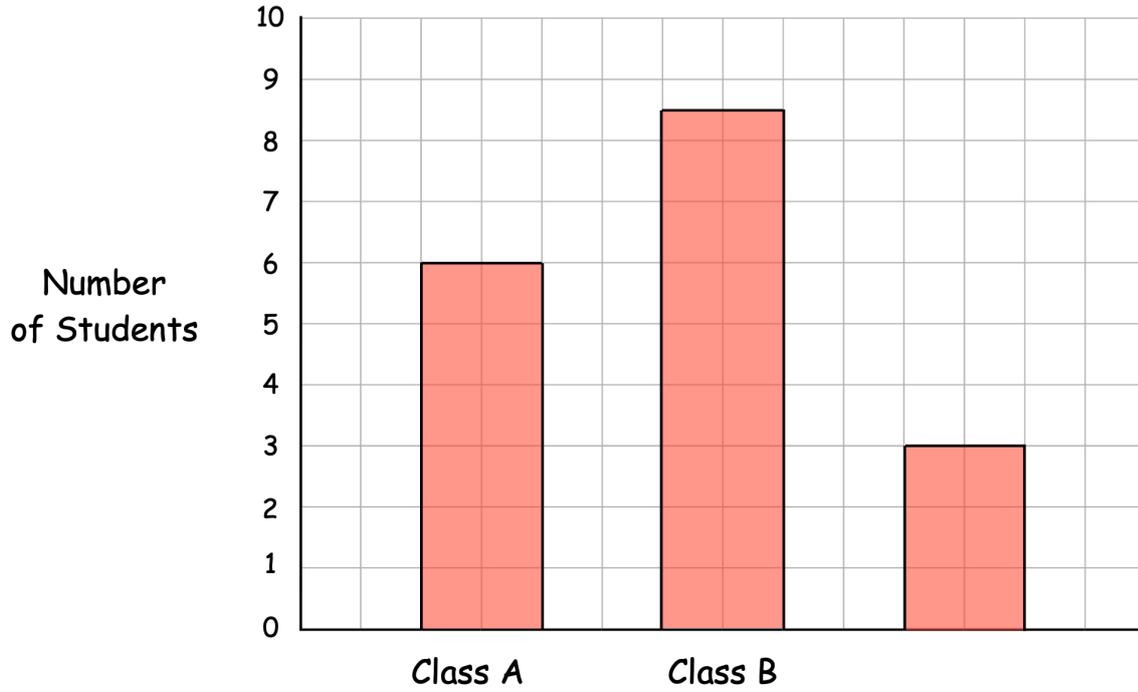
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(2)

2. The bar chart shows information about the number of Year 12 students late on Monday.



Students Late in Year 12



Make **two** criticisms of the bar chart.

Criticism 1

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Criticism 2

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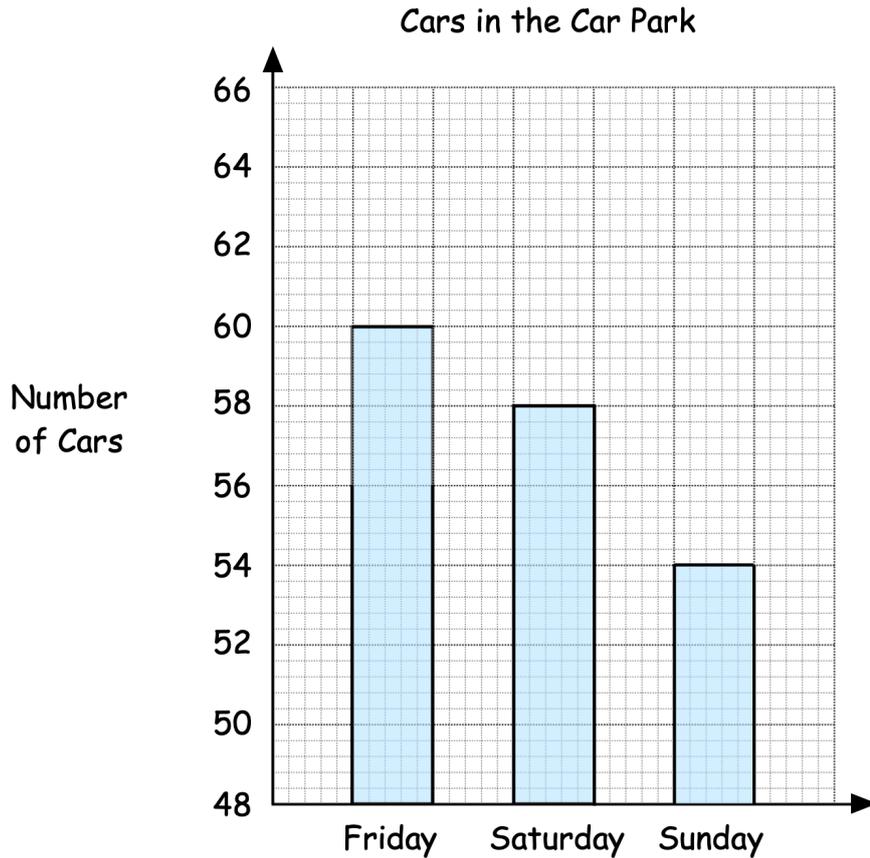
(2)

3. Alexandra records the number of cars in a car park over three days.



Day	Number of Cars
Friday	60
Saturday	57
Sunday	54

She uses this information to draw a bar chart.



Write down **two** mistakes that she has made.

Mistake 1

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Mistake 2

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(2)

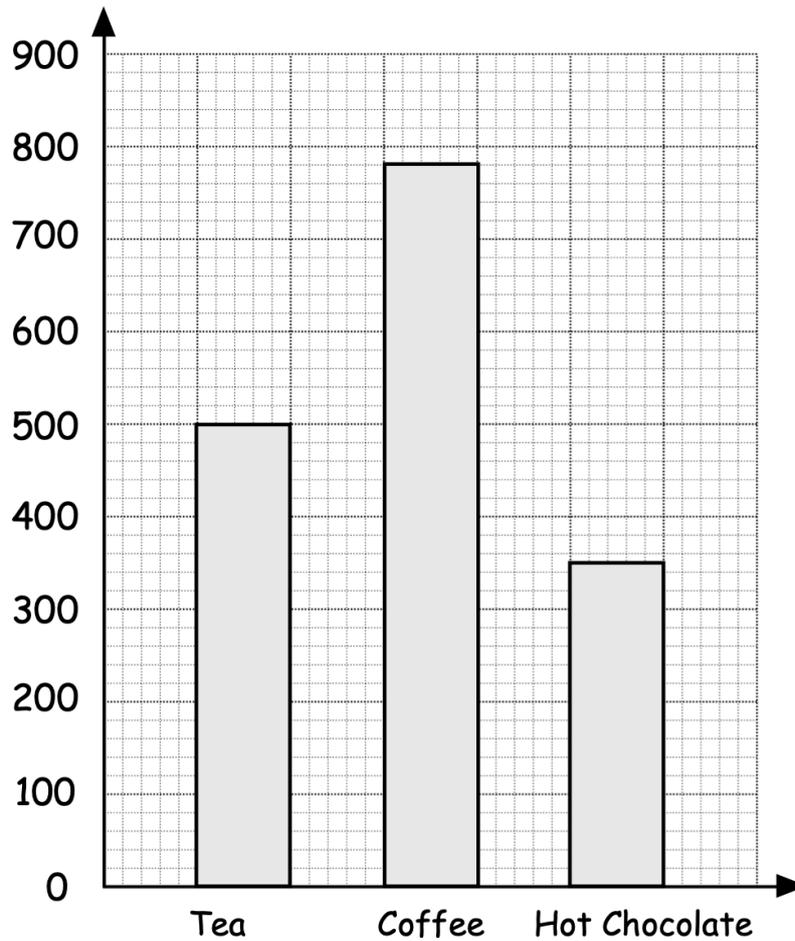
4. Emily owns a catering van.



The table shows her total sales of tea, coffee and hot chocolate last month.

Drink	Total Sales (£)
Tea	500
Coffee	790
Hot Chocolate	350

Emily drew this bar chart to represent the information in the table.



Make **two** criticisms of the bar chart.

Criticism 1

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Criticism 2

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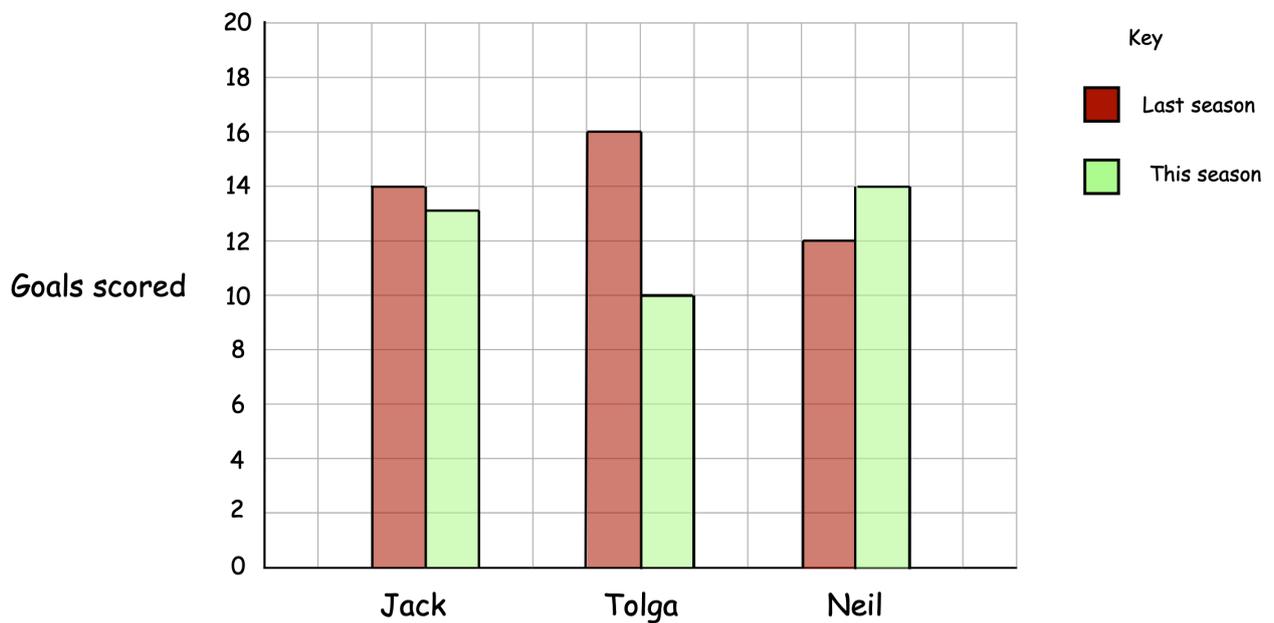
(2)

5. The table shows the number of goals Jack, Tolga and Neil scored last season and this season.



Footballer	Goals scored last season	Goals scored this season
Jack	14	13
Tolga	10	16
Neil	12	14

The coach then drew the dual bar chart below for this information.



Write down one thing that is wrong with this dual bar chart.

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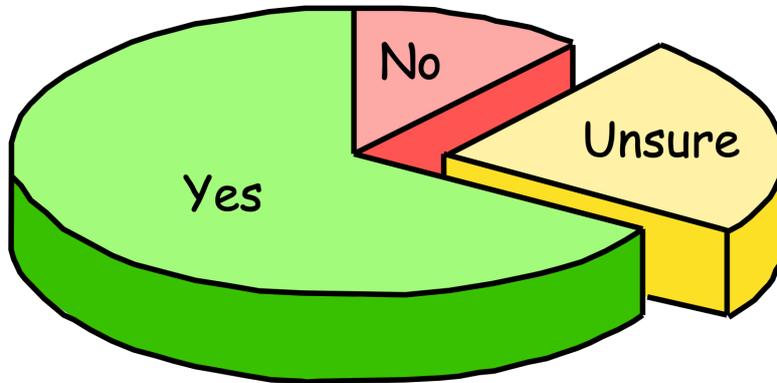
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(1)

6. The people living in a street were asked if they wanted new street lights. They could answer: yes, no or unsure.



This pie chart shows the results.



Explain why the diagram is misleading.

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(1)

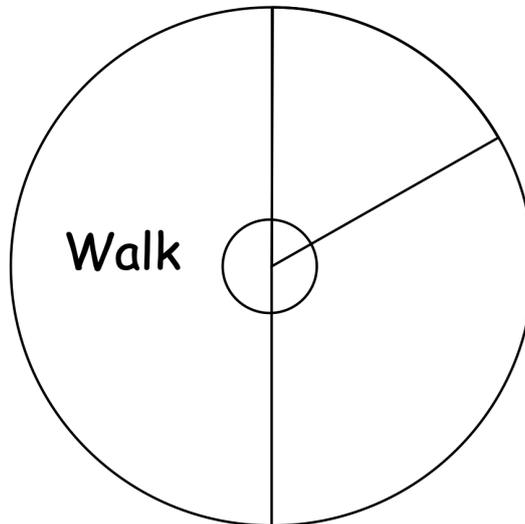
7. A headteacher asked the 300 students in her school how they travelled to school.



Here are the results.

Method of Transport	Number of Students
Bus	50
Car	70
Walk	180

This pie chart was drawn for the information in the table.



Make **two** criticisms of the pie chart.

Criticism 1

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Criticism 2

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(2)

8.

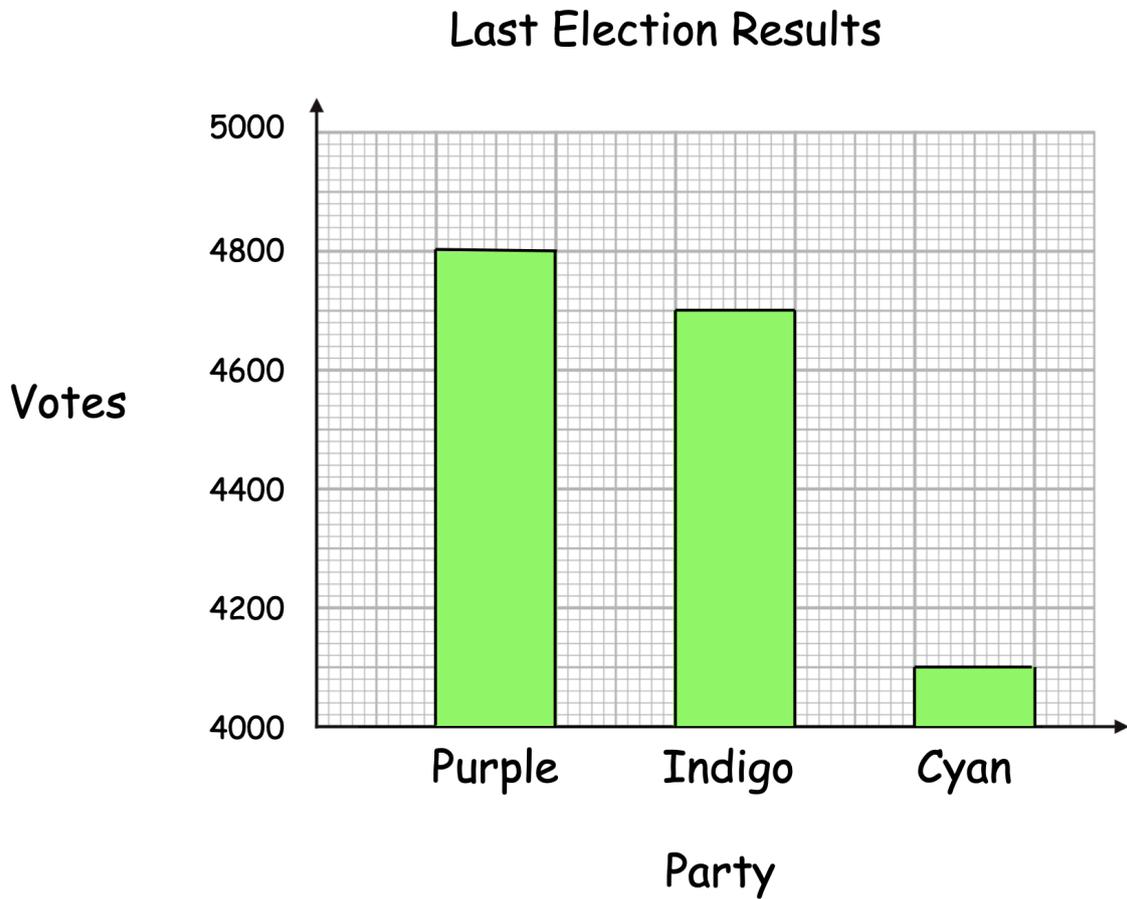
There is an upcoming election in an area.



Harry received a leaflet in the post that had the message:

“Vote for the Indigo Party, we are the only party that can beat the Purple Party.”

There was also this bar chart.



Explain why the leaflet is misleading.

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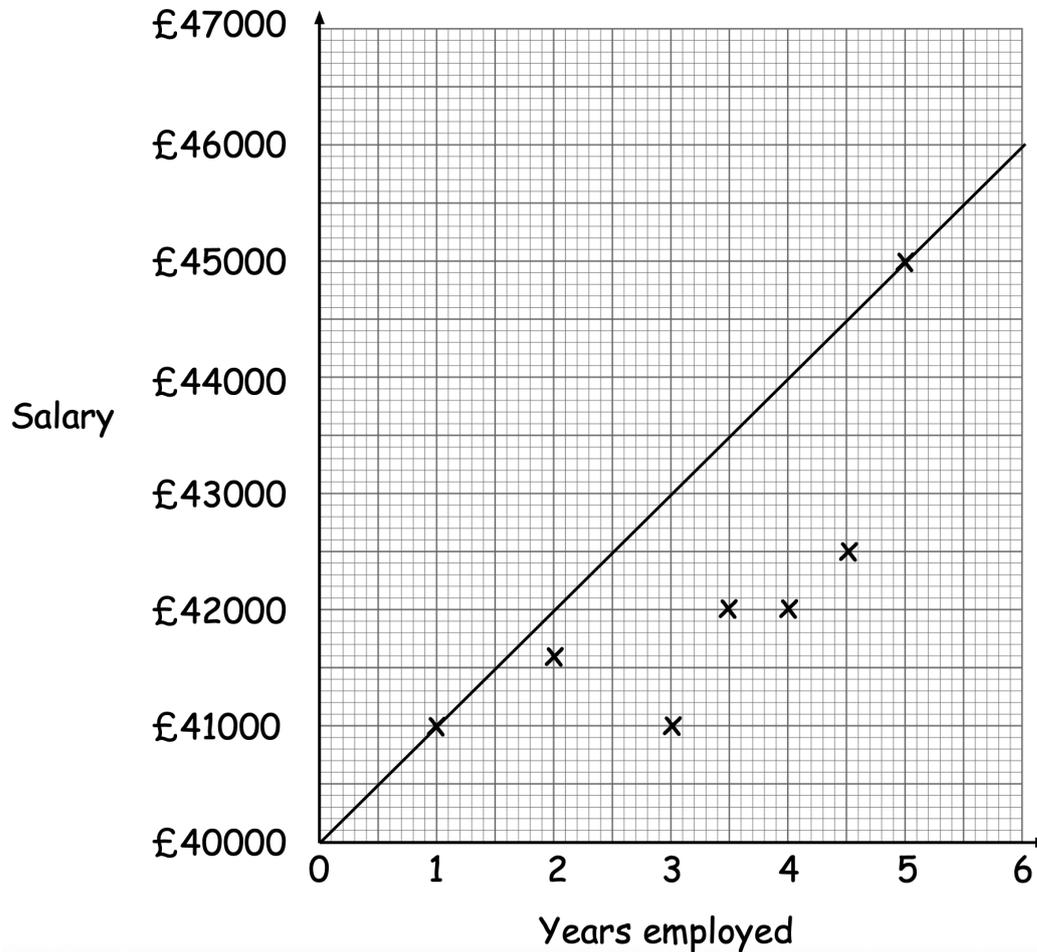
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(2)

9. The scatter graph shows information about the salaries received by 7 employees and how long they have been employed by a company.



A line of best fit has been drawn on the scatter graph.



The owner of the company claims the scatter graph shows that the salaries of the employees increases by £1000 each year they are employed.

Do you agree?

Explain your answer.

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(2)