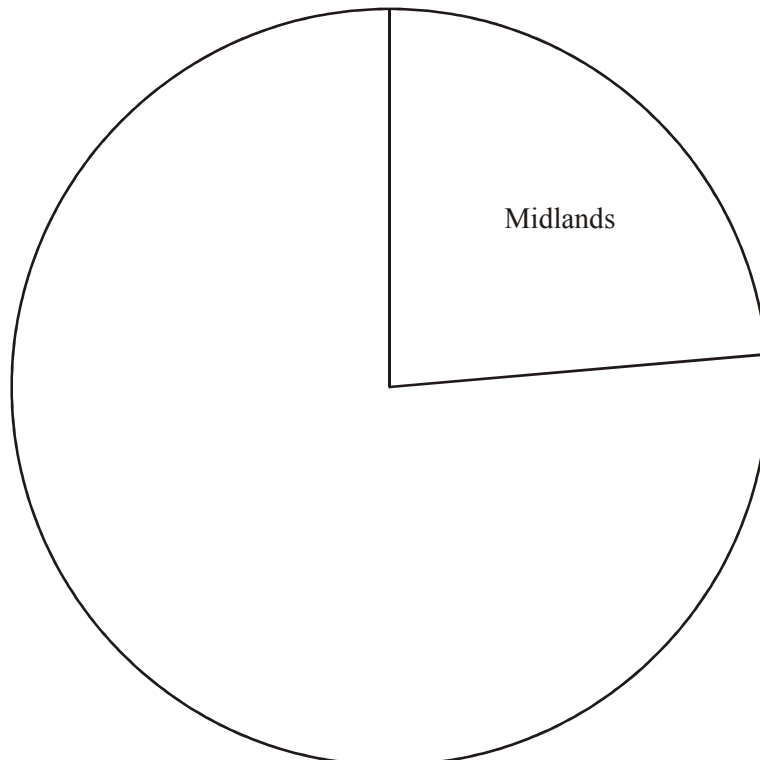## Topics

Pie charts – Stem and leaf tables – Scatter graphs – Bar charts

Questions

1.   Jasmine asked some people at a conference which region they came from.
The table shows her results.

Region	Frequency	
Midlands	44	
London	25	
Southern England	31	
Northern England	80	

(a)   Complete the accurate pie chart to show these results.
Use the circle given below.

Midlands

(Total 3 marks)

2. Jane weighs, in grams, 20 turnips from her allotment.
Here are her results.

178	189	147	147	166
167	153	171	164	158
189	166	165	155	152
147	158	148	151	172

Complete the stem and leaf diagram to show this information.

Stem	Leaf

(Total 3 marks)

3. Martin sells mountain bikes.
The scatter graph, below, gives information about the weight and the cost of some of the bikes he sells.

The table shows the weight and the cost of another three bikes.

Weight (kg)	10.9	12.2	12.7
Cost (£)	2699	2049	1699

(a) On the scatter graph, plot the information from the table.

(1)

(b) Describe the relationship between the weight of a bike and its cost.

....

....

(1)

(c) Draw a line of best fit on the scatter graph.

(1)

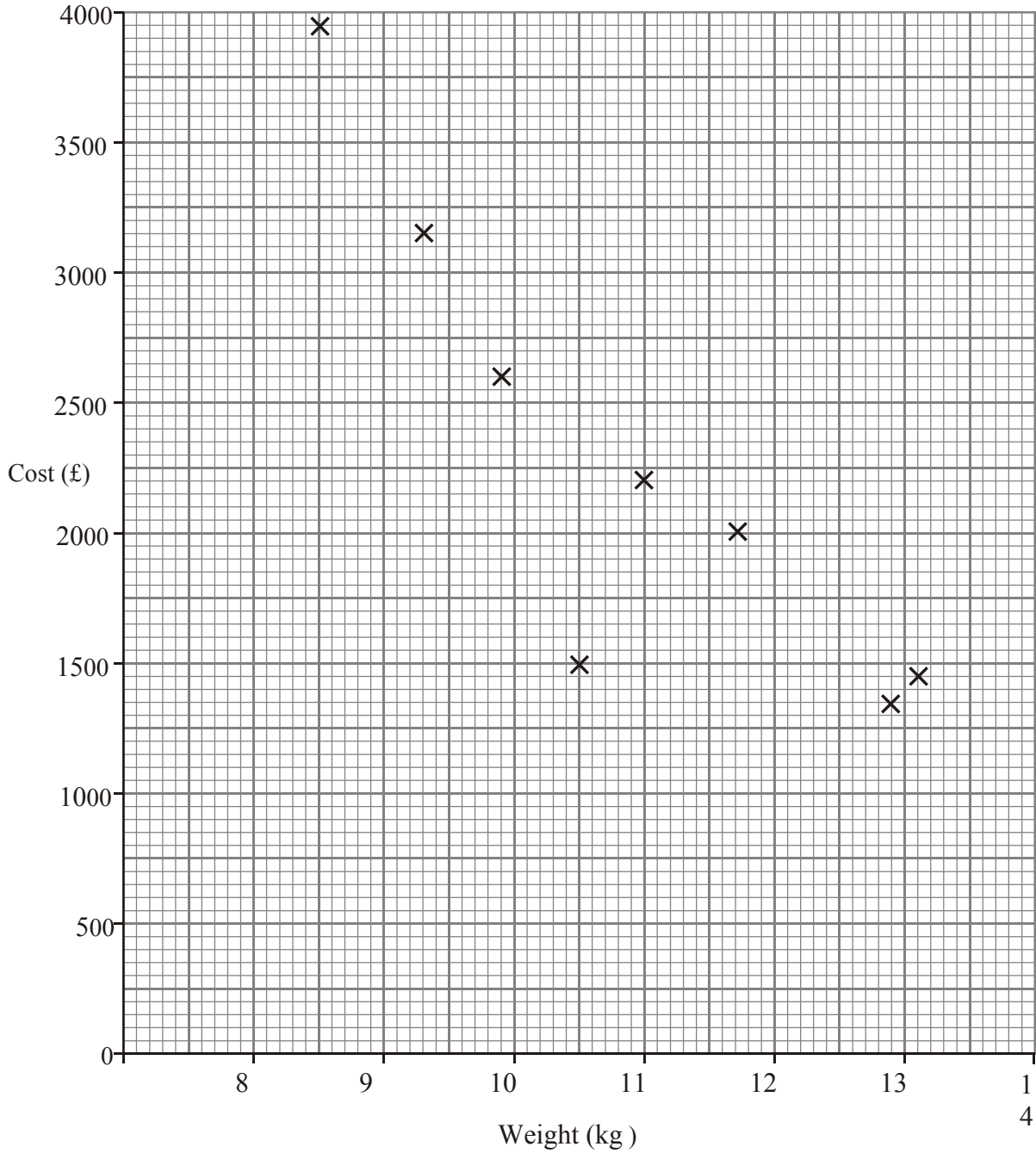(d) Use your line of best fit to find an estimate of the cost of a bike with a weight of 2500 kg.

£.................................

(1)

(Total 6 marks)

4.   David and Hayley are pupils at different schools.
They each did an investigation into their teachers' favourite colours.
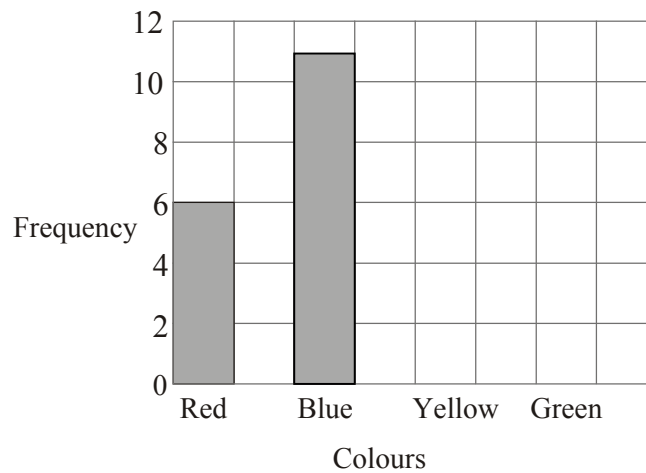Here is David's bar chart of his teachers' favourite colours.
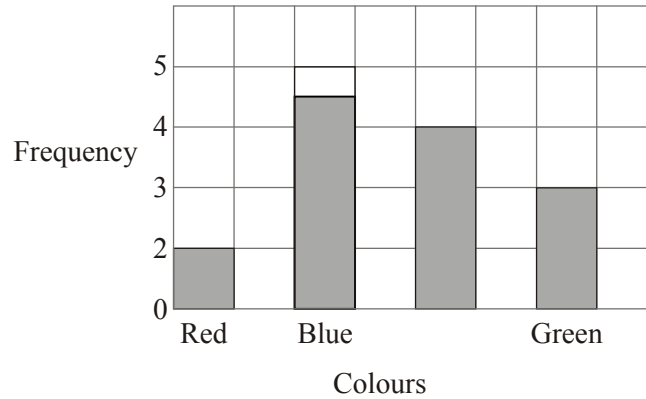
(a)   Write down two things that are wrong with David's bar chart.

....

....

(2)

Hayley drew a bar chart of her teachers' favourite colours.
Part of her bar chart is shown below.

9 teachers said that Yellow was their favourite colour.
4 teachers said that Green was their favourite colour.

(b)   Complete Hayley's bar chart.

(2)

(c)   Which colour was the mode for the teachers that Hayley asked?

....

(1)

(d)   Work out the number of teachers Hayley asked.

....
(1)

(e)   Write down the fraction of the number of teachers that Hayley asked who said Red was their favourite colour, write your answer in it's simplest form.

....
(1)
(Total 7 marks)