

- 1 The table shows the percentage of total sales in four departments of a supermarket during 2001 and 2002.

Department	% of total sales	
	2001	2002
Food	46	49
Electrical	18	21
Clothing	25	19
Leisure	11	11

The manager wants to compare the sales percentages for 2001 and 2002.

Which of these is the **most** appropriate way to present the information?

- A a scatter diagram
  - B a pie chart
  - C a double bar chart
  - D a tally chart
- 2 A motoring association offers car insurance. The monthly premiums are based on the driver's age and car insurance group.

Annual Insurance Premium (£)		Insurance Group						
		1	2	3	4	5	6	7
Age of driver	17-24	1 250	1 400	1 550	1 700	1 900	2 100	2 300
	25-29	1 150	1 300	1 400	1 500	1 650	1 800	2 000
	30-34	1 000	1 100	1 250	1 375	1 515	1 690	1 850
	35-39	850	900	1 125	1 225	1 395	1 535	1 680
	40-44	800	850	1 000	1 090	1 125	1 290	1 500
	45-49	750	780	810	880	960	1 180	1 325
	50-54	700	725	750	825	880	1 025	1 200
	55-59	625	655	690	750	810	940	1 085
	60-65	600	630	655	690	750	860	975
	Above 65	600	600	610	640	680	800	900

A driver is 43 years old and his car is in group 5.

What is his annual premium?

- A £960
- B £1090
- C £1125
- D £1395

Questions 3 and 4 use the following information.

A supermarket records the temperatures in its cold store over a 12 hour period.

There was a power cut **after 6 hours**.

The recommended temperature is  $-1^{\circ}\text{C}$



3 For approximately how long is the temperature outside  $2^{\circ}\text{C}$  of the recommended temperature **after the power cut**?

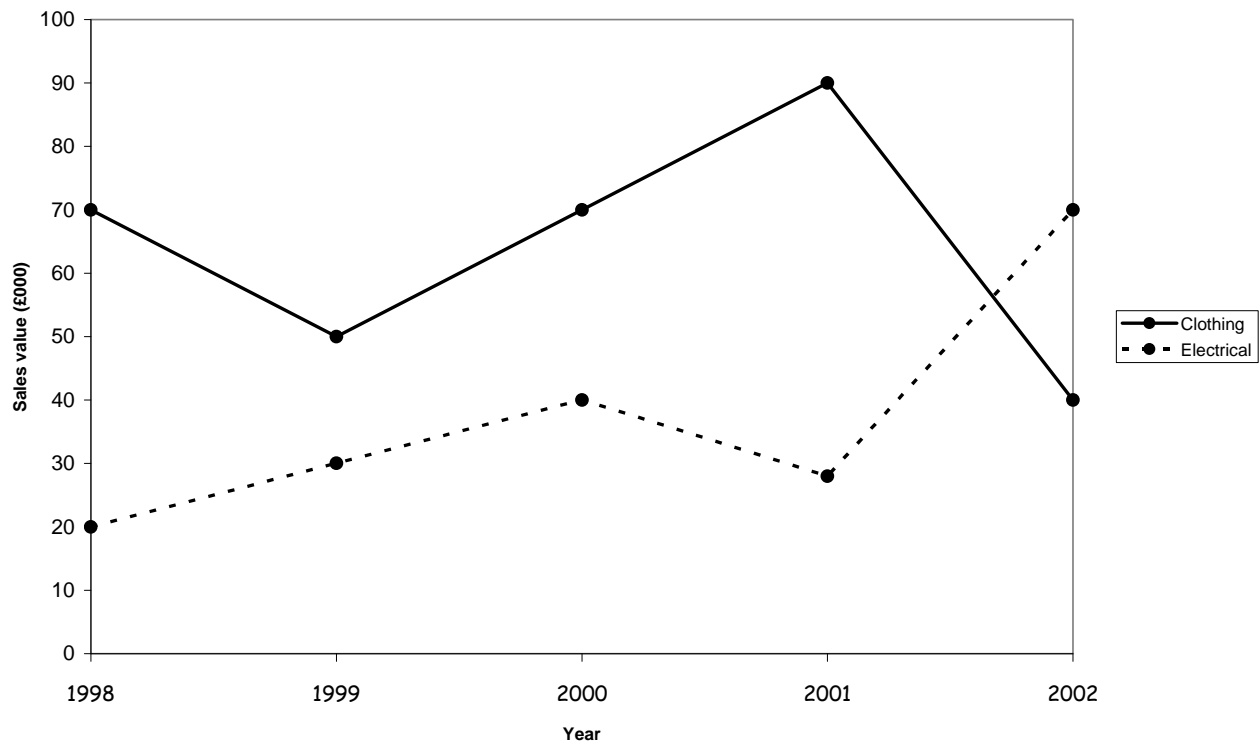
- A 6 hours
- B 5 hours
- C 2 hours
- D 1 hours

4 The range of the temperatures is

- A  $3^{\circ}\text{C}$
- B  $4^{\circ}\text{C}$
- C  $7^{\circ}\text{C}$
- D  $-7^{\circ}\text{C}$

- 5 The graph shows the value of sales in two departments of a supermarket for the years 1998 to 2002.

**Value of sales in clothing and electrical departments**



The graph shows that between 1998 and 2002

- A each year clothing sales were approximately twice those of the electrical department
- B the pattern of increases and decreases is the same each year for both departments
- C in 2000 the differences in sales between the two departments was approximately £20 000
- D in only one year during the period did the value of sales of electrical goods exceeded those of clothing

6 The table shows the annual costs for a delivery vehicle.

Annual cost	
Fuel	£3 800
Insurance	£720
Repairs	£2 030
Licence	£180
Depreciation	£470

The manager of the company draws an accurate pie chart to display the information.

What angle does he use to represent Insurance Costs?

- A 10°
- B 20°
- C 36°
- D 40°

7 On each Monday the manager keeps a tally of the times visitors enter the gardens at Warwick Castle.

Number of visitors		
Time of entry	This Monday	Last Monday
	Tally	Total
1000 to 1100		15
1101 to 1200		21
1201 to 1300		24
1301 to 1400		32
1401 to 1500		17
1501 to 1600		12
1601 to 1700		9

He compares the figures for this Monday with the totals for last Monday.

Which time period showed the greatest increase in visitor numbers this week?

- A 1201 to 1300
- B 1301 to 1400
- C 1401 to 1500
- D 1601 to 1700

**Questions 8 to 10 are about a cinema survey.**

- 8** The manager of a cinema complex conducts a survey of 3 000 people to find out how many films they came to see during 2002. Here are the results.

Cinema visits in a year	
Number of films seen	Number of cinemagoers
1-5	475
6-10	465
11-15	300
16-20	335
21-25	665
26-30	495
31-35	115
36-40	60
41-45	25
46-50	65
<b>Total</b>	<b>3000</b>

Which one of these is the **best** way to present this information?

- A** a frequency polygon
  - B** a double bar chart
  - C** a scattergraph
  - D** a pictogram
- 9** The same cinema considers attendance records.  
In a survey of 3000 people in the year 2000, 1265 said they had seen more than 20 films.

How has that number changed in the 2002 survey?

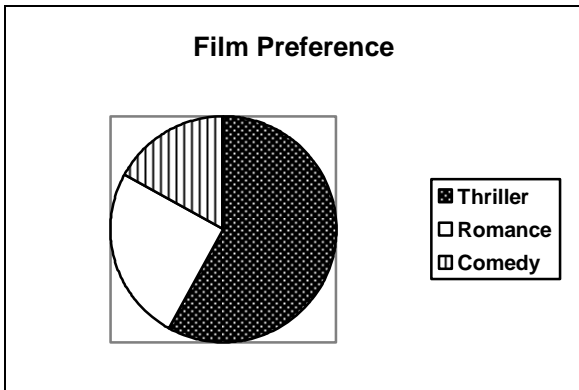
- A** 160 fewer
- B** 160 more
- C** 310 fewer
- D** 310 more

**10** In another survey, cinemagoers were asked which type of film they preferred to see. Here are the results of the survey.

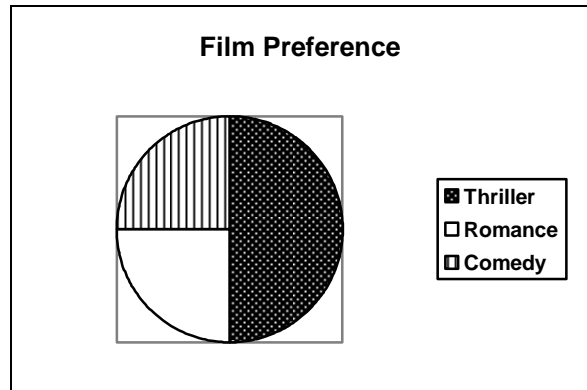
Thriller	58%
Romance	25%
Comedy	17%

One of these pie charts shows this information.

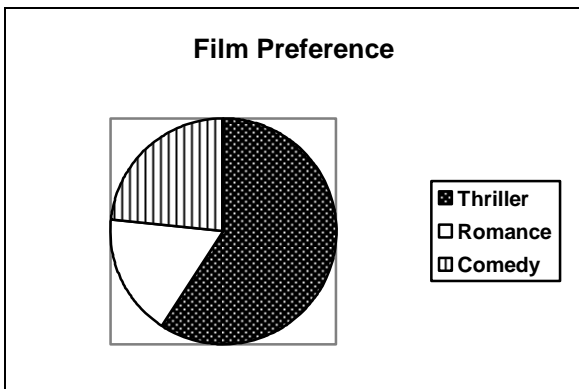
**Chart a**



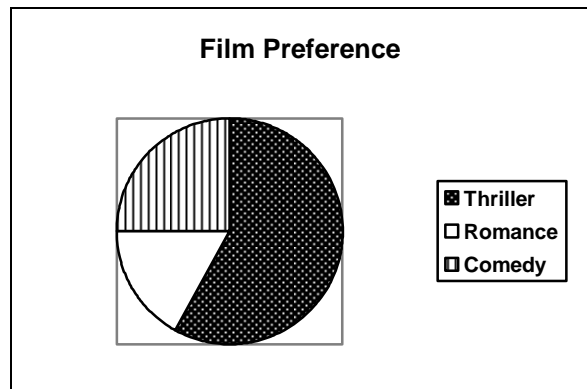
**Chart b**



**Chart c**



**Chart d**

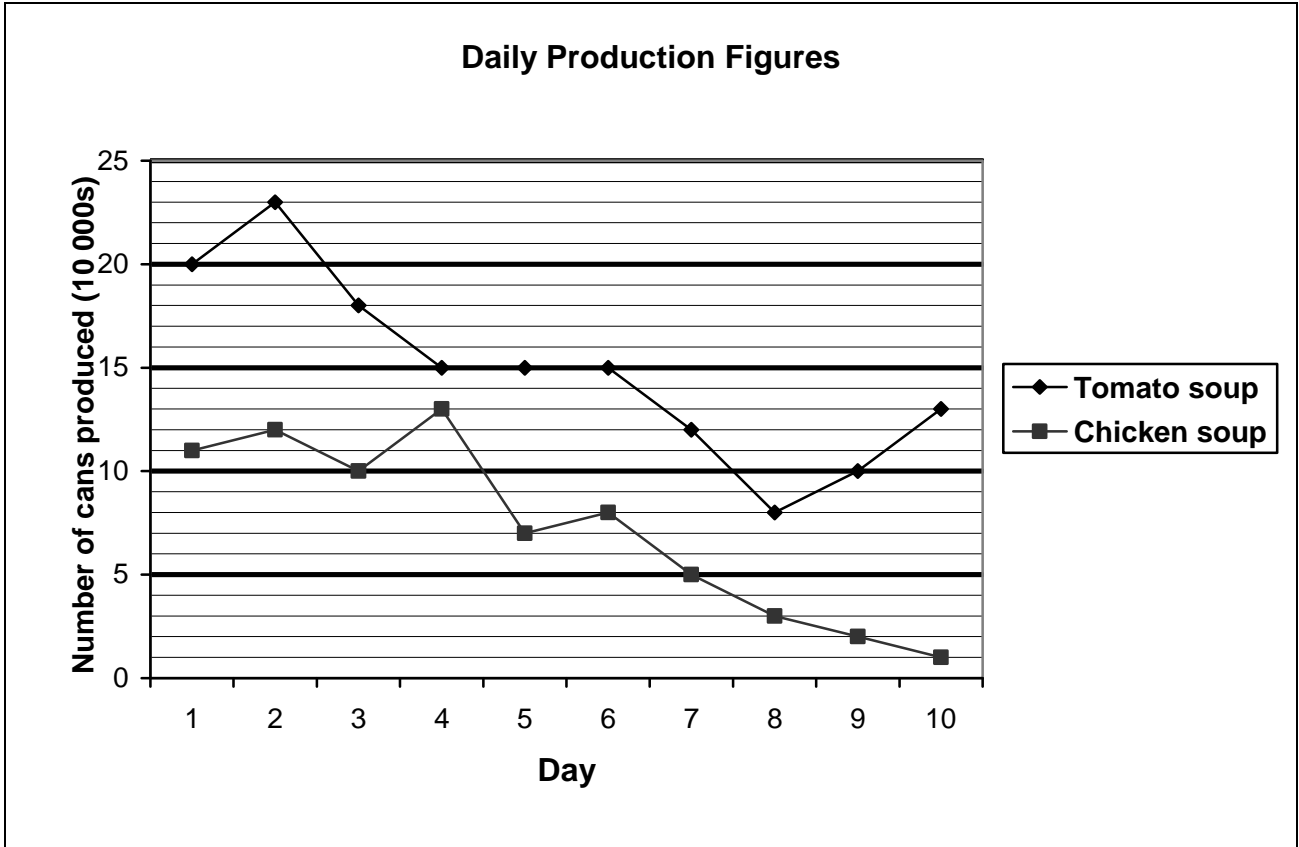


Which chart is correct?

- A** Chart a
- B** Chart b
- C** Chart c
- D** Chart d

Questions 11 to 13 are about a factory that makes soup.

The graph shows the production figures over 10 days for two different soups.



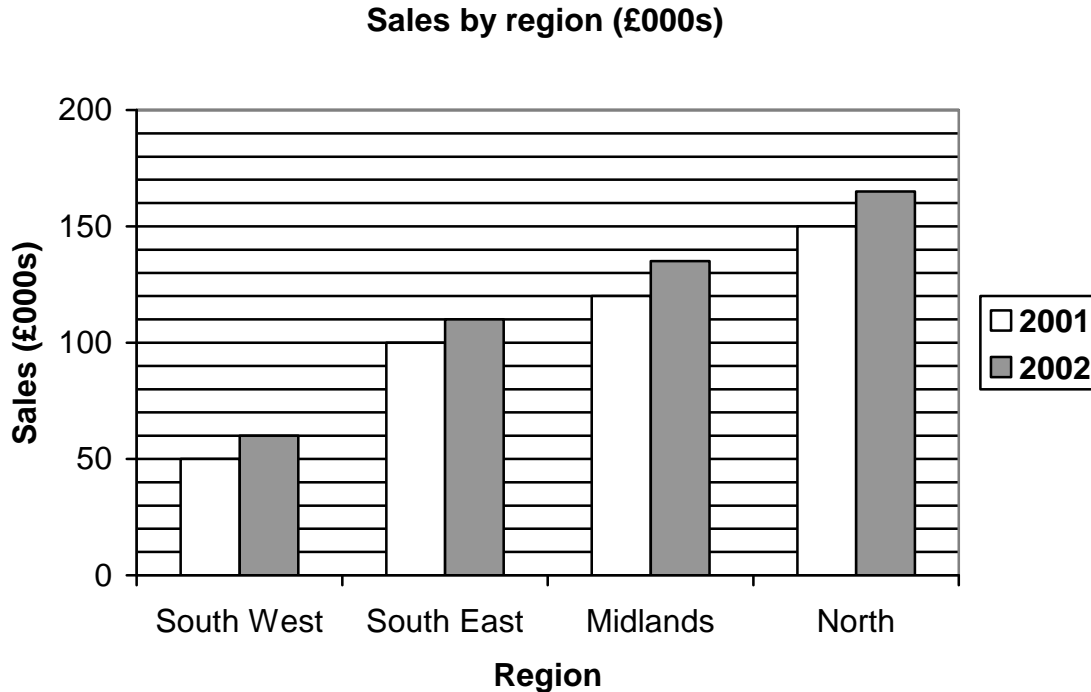
11 What is the greatest difference between the production figures for tomato soup and chicken soup for any single day?

- A 90 000 cans
- B 120 000 cans
- C 220 000 cans
- D 230 000 cans

12 What is the range of production figures of tomato soup?

- A 70 000 cans
- B 120 000 cans
- C 150 000 cans
- D 230 000 cans

13 The company presents sales in different regions on a chart.



In 2002, how much greater were sales in the North than sales in the South West?

- A £100 000
- B £102 500
- C £105 000
- D £115 000

14 The table shows a centre's opening times for the low and the high seasons.

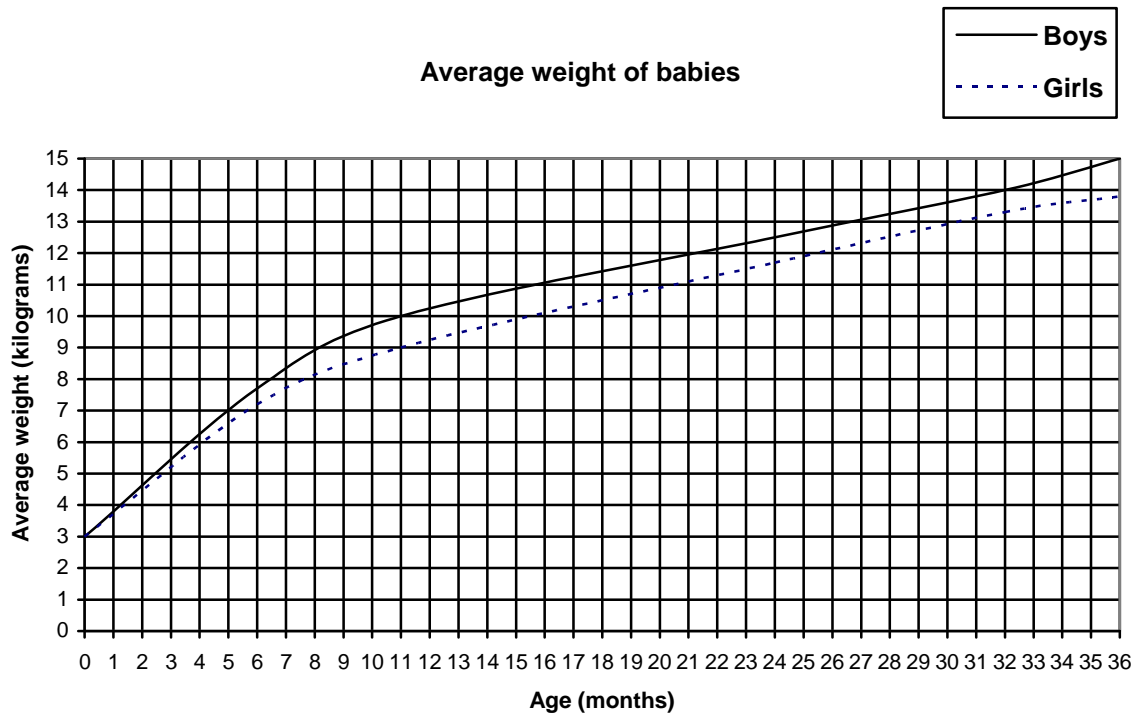
Centre opening hours		
	Low season	High season
<b>Mon - Sat</b>	1000 to 1300 and 1400 to 1730	0930 to 1800
<b>Sun</b>	closed	1300 to 1700

What is the number of **extra** opening hours per week in the high season compared with the low season?

- A 13 hours
- B 14 hours
- C 15 hours
- D 16 hours



15 The graph shows the average weight of boy and girl babies up to the age of 36 months.



What is the **increase** in the average weight of a **boy** during the first 24 months of life?

- A 8.5kg
- B 9.5kg
- C 11.7kg
- D 12.7kg

16 A charity runs a shop. The table shows sales figures for two months.

Category	January	February
Clothes	£684	£750
China	£150	£205
Books	£345	£370
Cards	£67	£197
Toys	£251	£350
Other	£195	£243
<b>Total</b>	<b>£1 692</b>	<b>£2 115</b>

An assistant wants to draw a graph or chart to show the **proportion** of sales for each category in January. Which method of presentation is most appropriate?

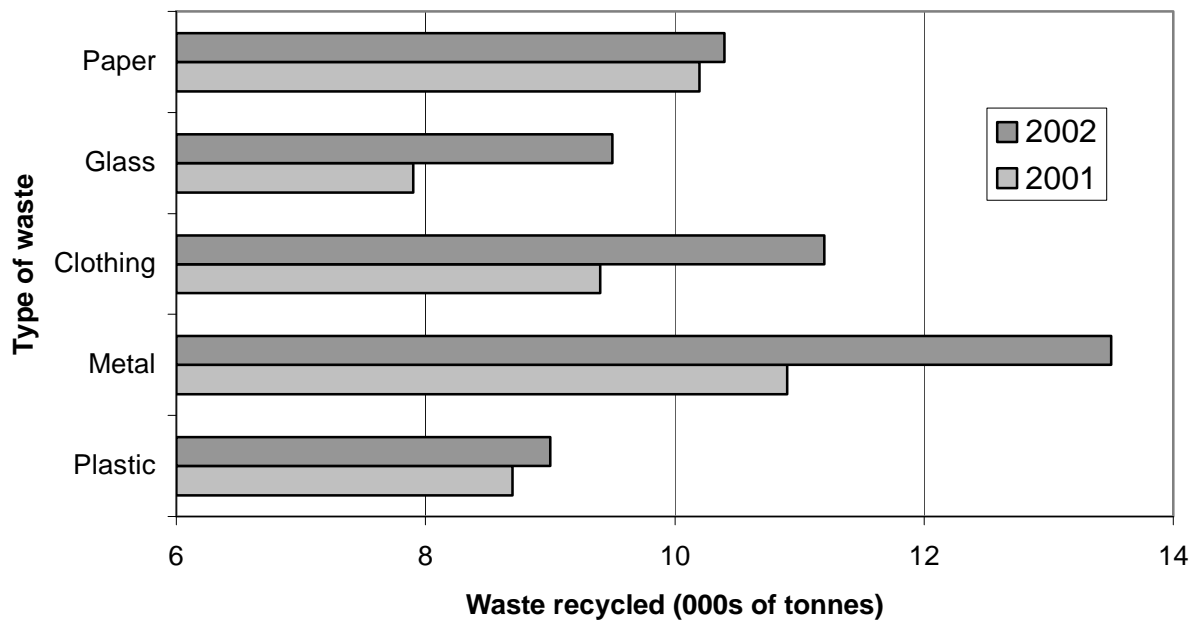
- A a line graph
- B a scattergraph
- C a pie chart
- D a frequency table

17 The table below shows the amount of waste recycled in 2001 and 2002.

Waste recycled 2001 and 2002 (000s of tonnes)		
Type of waste	2001	2002
Paper	10.2	10.4
Glass	7.9	9.5
Clothing	9.4	11.2
Metal	10.9	13.5
Plastic	8.7	9.0

A council employee draws a chart to show the increase in recycling over the two years.

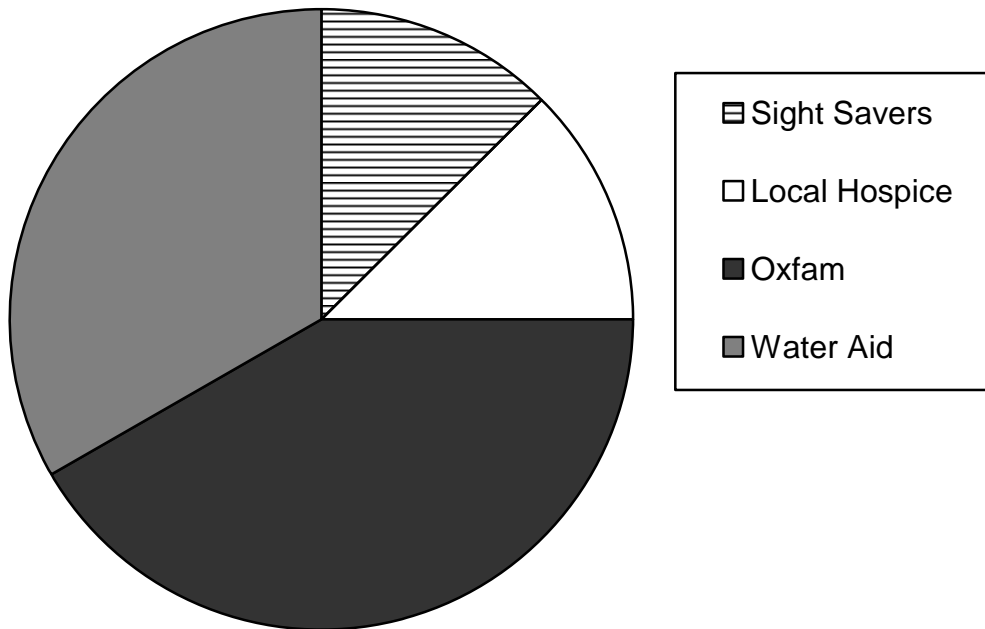
**Waste recycled in 2001 and 2002**



The chart is misleading because

- A the key is incorrect
- B the bars are horizontal
- C the axis labels are incorrect
- D the horizontal axis does not start at zero

- 18** The organiser of a charity ball draws a pie chart to show how the money is shared between the different charities.



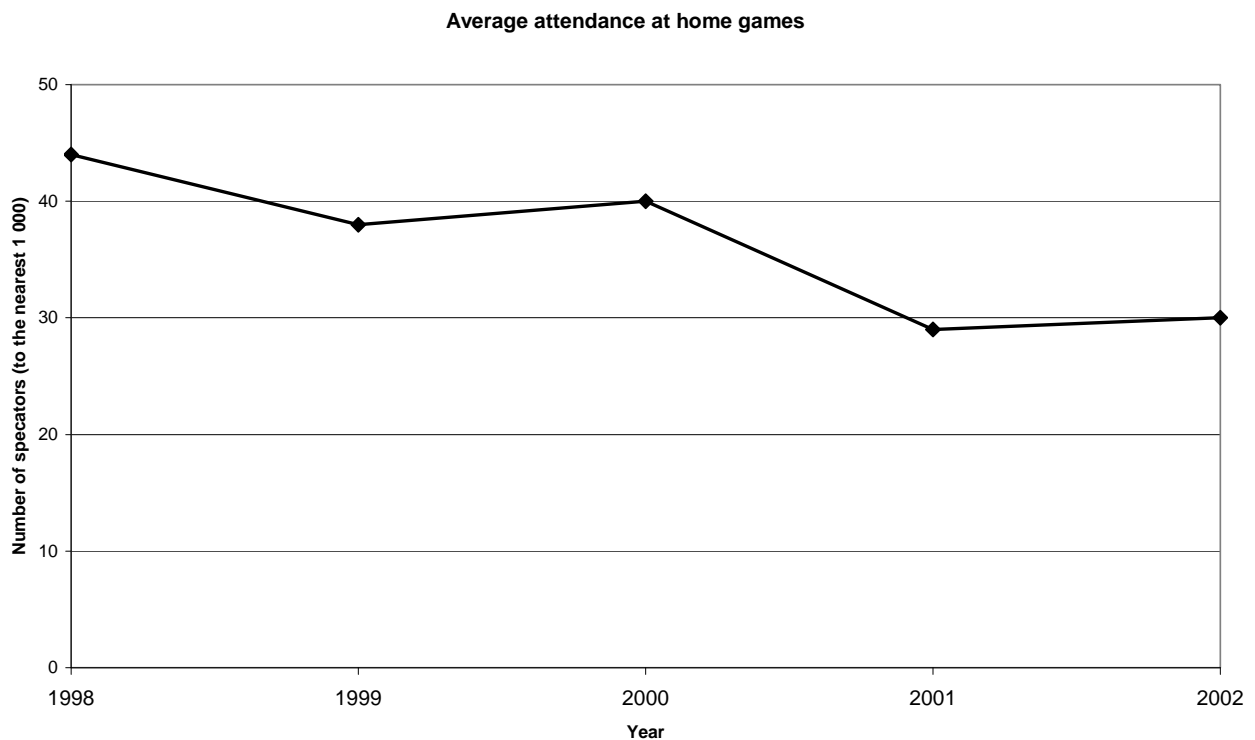
Which statement is correct?

- A** Oxfam received more than half of the money
- B** Water Aid received more than half of the money
- C** Water Aid received more of the money than Oxfam
- D** Oxfam received more of the money than Water Aid

19 A football club official works out the average attendance at home games.

Average attendance at home games	
Year	Number of spectators (to nearest 1 000)
1998	45 000
1999	35 000
2000	40 000
2001	28 000
2002	30 000

The official produces a graph to show the information from the table.



The graph has an error.

Where is it?

- A in the title
- B in the plotting of some points
- C in the labelling of the horizontal axis
- D in the labelling of the vertical axis

Questions 20 to 22 are about some holiday accommodation.

The table shows details of the holiday accommodation in a six-bedroom guest house.

Holiday accommodation		
Number of bedrooms	Description of bedrooms	Cost per person per night
3	bedrooms for 2 people with private bathroom	£20*
1	bedroom for 2 people with shared bathroom	£17*
2	bedrooms for 1 person with shared bathroom	£18
<i>*indicates extra charge if only 1 person in the room = £5 per night</i>		

20 What is the lowest **total** cost for one person to stay at the guesthouse for **two** nights?

- A £17
- B £18
- C £34
- D £36

21 One night all the rooms are fully occupied.  
How much money does the owner receive for that night?

- A £190
- B £172
- C £113
- D £92

22 The owner keeps a record of the number of guests booked into each room during one week.

Number of guests booked in							
Room	Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	0	2	2	2	2	0
2	0	2	1	1	2	2	2
3	2	2	1	1	2	2	1
4	2	1	2	0	2	0	2
5	1	0	1	1	1	1	1
6	0	1	1	0	1	1	0

The owner needs extra help when she has more than seven guests booked in.  
On which nights are **more than** seven guests booked in?

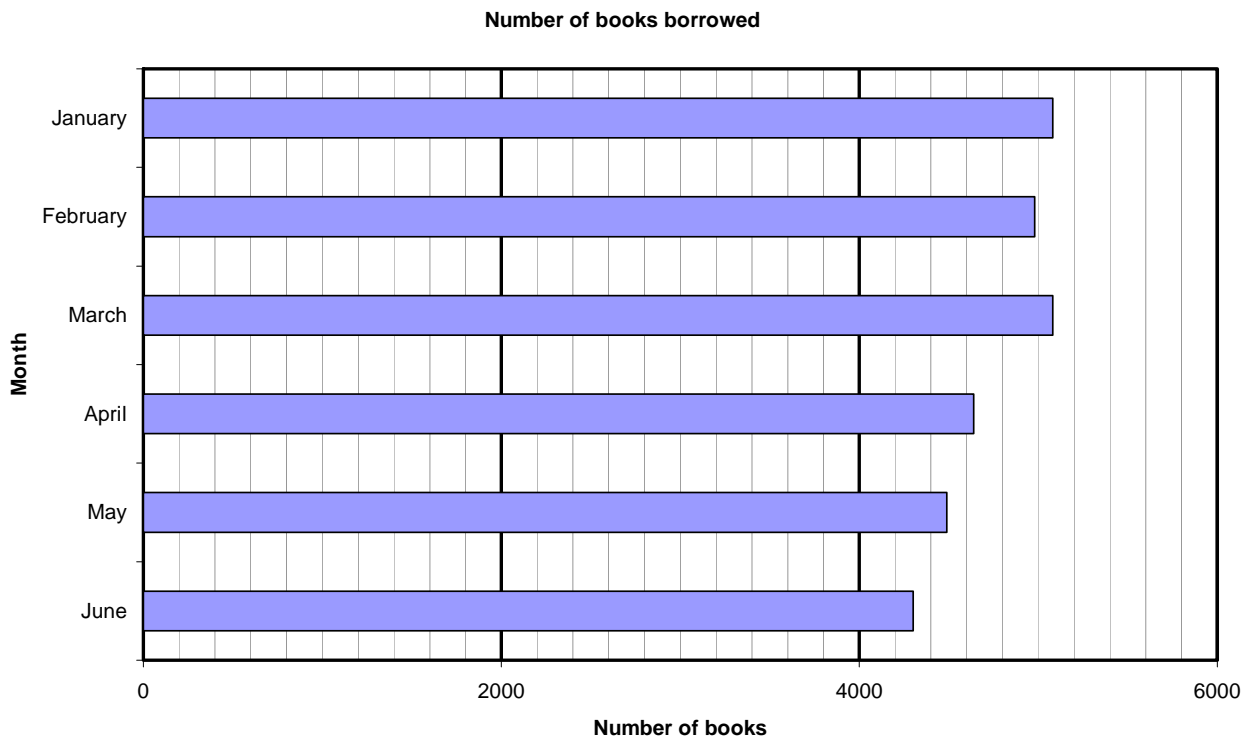
- A Wed and Fri only
- B Wed, Fri and Sat only
- C Mon, Wed and Fri only
- D Mon, Wed Fri and Sat only

**Questions 23 and 24 are about a library.**

The library lends books, CDs and videos.

A librarian keeps a record of the number of items borrowed each month.

**23** The bar chart shows the number of books borrowed over a six-month period.



To the nearest 100 books, what is the **difference** in the number of books borrowed in January and in June?

- A 300
- B 600
- C 700
- D 800

**24** The librarian makes a poster to show the **ratio** of books : videos : CDs that people borrow. Which of these is the **most** effective way of showing the ratio?

- A a pie chart
- B a line graph
- C a frequency table
- D a scatter graph