

HANDLING DATA

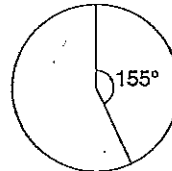
Pie charts

The easiest way to show or measure percentages on a pie chart is with a pie chart scale, which is marked from 0 to 100%.

If you have to use a protractor marked in degrees you can use conversions like these.

Crimes involving property	64%
Other crimes	36%

To draw a sector for 64% of the total, work out 64% of 360° , which is $360 \times 0.64 = 230^\circ$ (to nearest 1°).



If you have measured an angle of 155° , the percentage it represents is $\frac{155}{360} \times 100 = 43^\circ$ (to nearest 1°).

Percentages ► page 6

- 1 In 1985–86 the government spent its income as shown in the table:

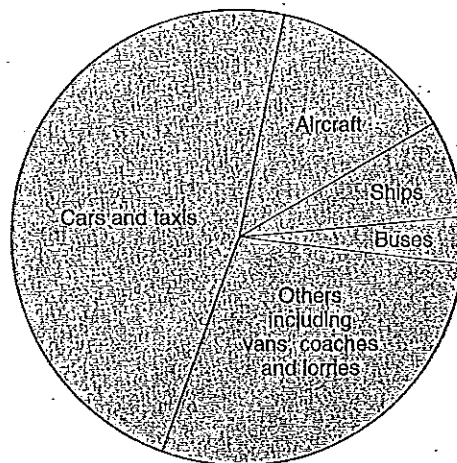
	£ (billions)	%
Health and Social Security	56.5	42.8
Defence	18.1	
Education	14.2	
Housing and Environment	5.4	
Industry and Transport	8.5	
Other	29.3	
Total	132.0	

- (a) Copy the table and complete the % column, giving your answer to one decimal place.
 (b) Show the information in a pie chart. Label it clearly.

MEG/ULEAC (SMP)

- 2 The pie chart shows the use of petroleum by different types of transport in Great Britain in 1990.

- (a) What percentage of petroleum was used by cars and taxis?
 (b) What percentage was used by ships and aircraft altogether?
 (c) The total amount of petroleum used by transport in 1990 was 70 million tonnes. How many million tonnes were used by ships and aircraft altogether?
 Give your answer to the nearest million tonnes.



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Answers and hints ► page 139

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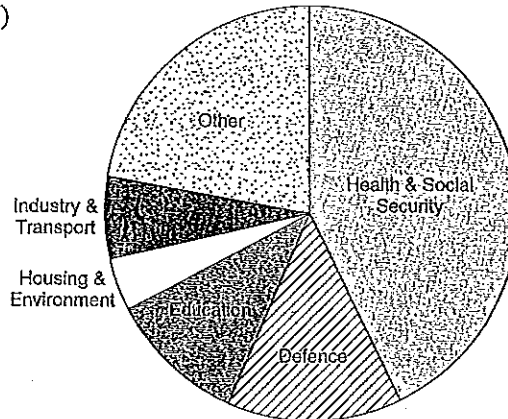
Pie charts (page 71)

When you draw a pie chart in answer to a question, marks will almost certainly be awarded for labelling each sector.

1 (a)

	£ (billions)	%
Health and Social Security	56.5	42.8
Defence	18.1	13.7
Education	14.2	10.8
Housing and Environment	5.4	4.1
Industry and Transport	8.5	6.4
Other	29.3	22.2
Total	132.0	100.0

(b)



- 2 (a) 48% of the petroleum was used by cars and taxis.
 (b) 20% was used by ships and aircraft altogether.
 (c) 14 million tonnes were used by ships and aircraft altogether.

More help or practice

Pie charts – Book R1 pages 122 to 123