

To be able to draw a percentage bar chart we simply need to be able to calculate percentages. Thereafter, the technique is exactly the same as for ordinary bar charts.

### Example 3

The table shows the sales (in £ mill.) in 1998 of a company by division:

Division	Defence	Aerospace	Software	Electronics
Sales (£mill.)	14.92	25.31	5.64	3.07

Draw a percentage bar chart to show this information.

#### Solution:

We must calculate each quantity as a percentage of the total.

So we start by getting the total:  $14.92 + 25.31 + 5.64 + 3.07 = 48.94$

Next, calculate the percentages:

$$\text{Defence: } \frac{14.92}{48.94} \times 100\% = 30.49\%$$

$$\text{Aerospace: } \frac{25.31}{48.94} \times 100\% = 51.72\%$$

$$\text{Software: } \frac{5.64}{48.94} \times 100\% = 11.52\%$$

$$\text{Electronics: } \frac{3.07}{48.94} \times 100\% = 6.27\%$$

It is often a matter of personal preference as to how many decimal places you offer in the answer. Many accountants prefer two decimal places. Why? Perhaps because the calculations look more impressive and 'accurate', and hence appear to carry more authority.

But the graph that follows will barely manage the nearest whole number, as you will see.

In any event, we obtain the following table:

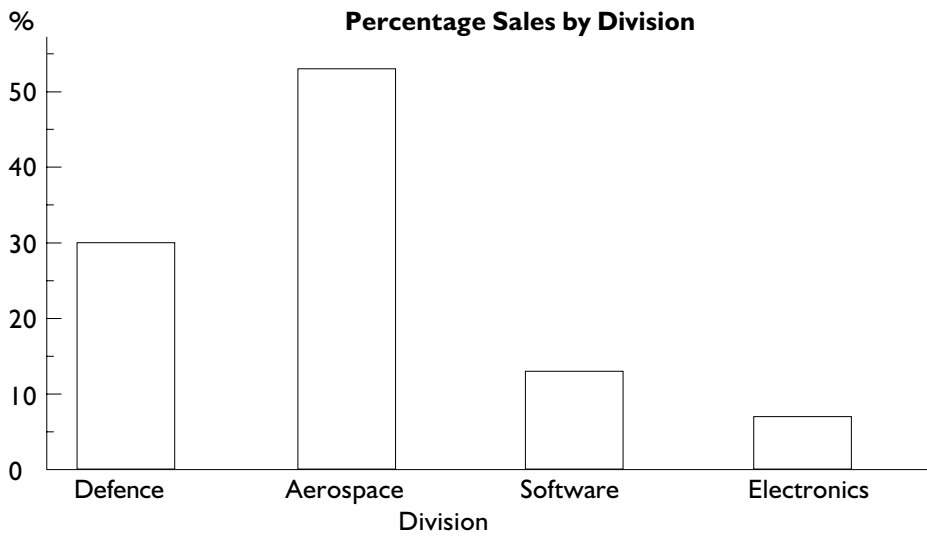
Division	Defence	Aerospace	Software	Electronics
Sales (%)	30.49%	51.72%	11.52%	6.27%

Check that the percentages do actually add up to 100, which in this case they do. (If they add up to 99.9 or 100.1, don't worry, it's caused by unfortunate rounding!)

The vertical (percentage) scale only has to go as far as the highest percentage, i.e. 52%.

Note that there are better ways to illustrate similar percentage breakdowns, as you will see later.

Here is the bar chart:



The heights of the bars will probably be as follows:

Defence – between 30 and 31

Aerospace – 52

Software – about 11½

Electronics – 6



Draw percentage bar charts for the two tables of information which are given in Exercise 2 on page 9.