## Worksheet 9-10 Misleading graphs

Graphs don't always tell the story as it really is. They can mislead people and at times are deliberately used in this way.

1 The Brown Disc company presented the following graph to show its profits over the year.
a What impression does this graph give?
b What is misleading about this graph?
c Why do you think the company would present this graph?
d Draw another graph which truly reflects the profits of this company.
e What does your version of the graph show?


2 This graph shows the sale of books in a store over three years.
a In what way is this graph misleading?
b Give the number of books sold in:
i 1996 $\qquad$
ii 1997 $\qquad$


3 This graph shows how much money Japan invests in some countries.
a How is this graph misleading?
b Assuming that the figures are:

| United Kingdom | $\$ 6.8$ billion |
| ---: | ---: |
| Australia | $\$ 4$ billion |
| Holland | $\$ 3.2$ billion |
| Hong Kong | $\$ 2$ billion |

Redraw the graph correctly.


## Worksheet 9-10 Misleading graphs continued

## Answers

1 a There has been a big increase in profits
b The vertical scale only goes from 40 to 41
c To impress shareholders, etc.
d Teacher to check
e Profits have only increased slightly
2 a Pictures show volume (3-D) rather than a column
b i 1000
ii 2000
iii 4000

3 a No vertical scale
b Teacher to check

