1) The two graphs below show the profits of the Crazy Car Company.

Crazy Car Company Profit

Crazy Car Company Profit
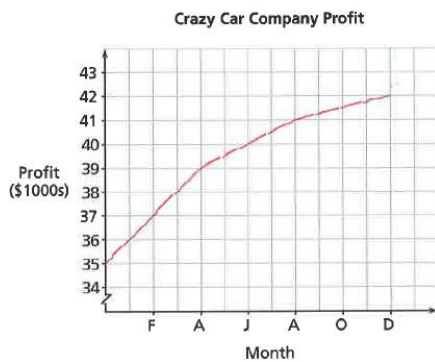
a) How are the graphs similar? How are they different?
b) How much has the profit increased on each graph?
c) What false impressions are conveyed by the two graphs?

2) The increase in the size of homes purchased is shown in the graph below.

a) What is similar about the homes?
b) Using the tiles of the graph, how many times bigger is the area of the shape of house B than the area of house A?
c) By how much has the actual size of the home increased.
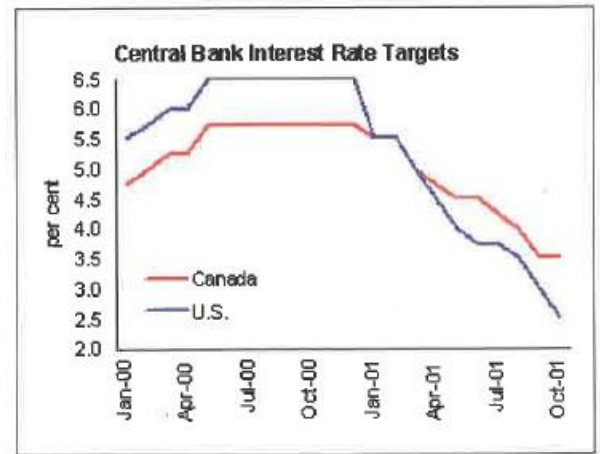**d)** List any false impressions conveyed by the graph.

1500 square feet

3000 square feet
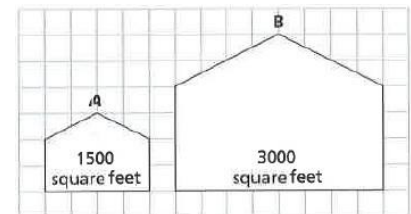
3) List the false impressions conveyed by this graph. How could you change the graph to correct the false impressions?

Cost of a Chocolate Bar
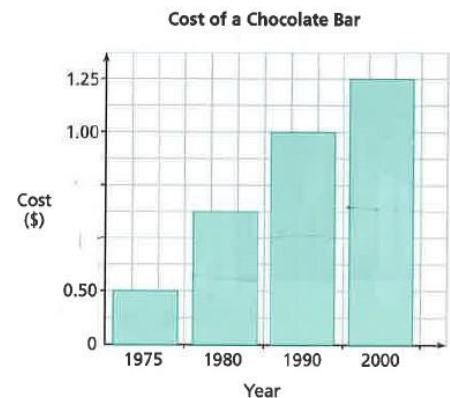
4) Examine the graph below.

a) Has the data been misrepresented to bias the reader? Give reasons.

b) How could you modify the graph to display the data accurately?

Central Bank Interest Rate Targets

per cent

6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0 — Canada
2.5 — U.S.
2.0

Jan-00 Apr-00 Jul-00 Oct-00 Jan-01 Apr-01 Jul-01 Oct-01

Source: Phillips, Hager & North
Investment Management Ltd.

5) The graph below shows the population of Hong Kong from 1993 to 1999. Explain why this graph would cause incorrect interpretations of the data.

Population of Hong Kong

Population
(millions)

7.0
6.5
6.0
5.5
5.0

93   94   95   96   97 98 99
Year
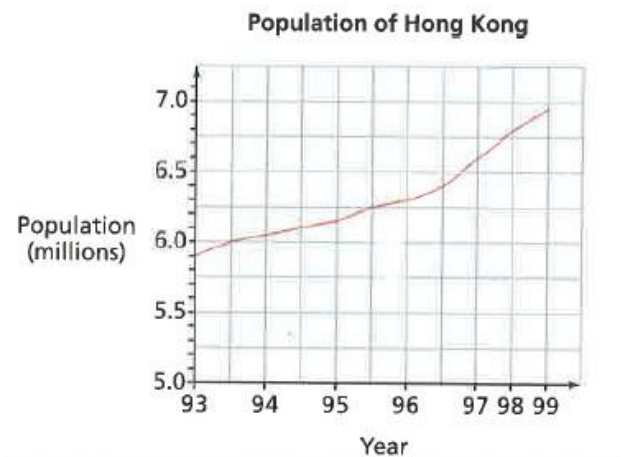
6) Suppose that in a recent magazine article, the graphic below was used to show how the use of cell phones changed between 1994 and 1998. Explain why this picture is misleading.

Mobile Phones per 1000 Population

1994   1998

71   420