## Section 1.7 Worksheet - Misrepresentations of Data

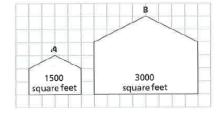
MDM4U Jensen

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

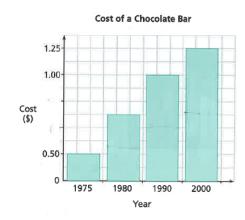




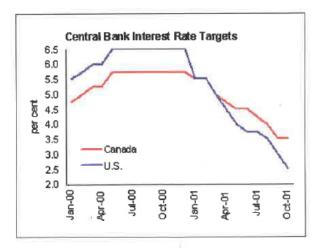
- a) How are the graphs similar? How are they different?
- **b)** How much has the profit increased on each graph?
- c) What false impressions are conveyed by the two graphs?
- 2) The increase in the size of homes purchased is shown in the graph below.
- a) What is similar about the homes?
- **b)** Using 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.



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

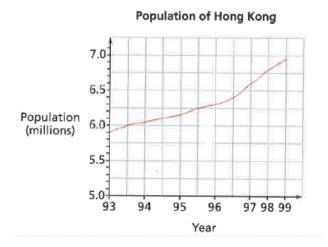


- **4)** Examine the graph below.
- **a)** Has the data been misrepresented to bias the reader? Give reasons.
- **b)** How could you modify the graph to display the data accurately?



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.



**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.

