

Name: Key
Date: _____

Mr. Johnson
Math 8

Lesson 7.2 – Misrepresenting Data

Benjamin Disraeli, a 19th-century British prime minister, is frequently quoted. Two of his sayings are very applicable to this section:

“This shows how much easier it is to be critical than to be correct.”

“There are three kinds of lies: lies, damn lies, and statistics.”

Investigate:

Complete the Investigate activity on page 394 of your textbook by yourself. Answer the questions that are listed on the page in the space below.

(Student response)

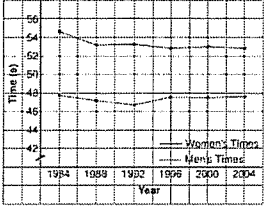
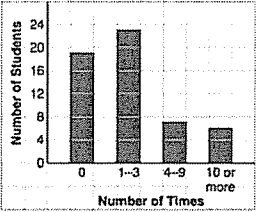
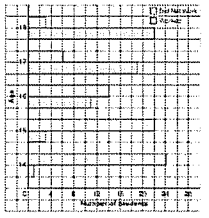
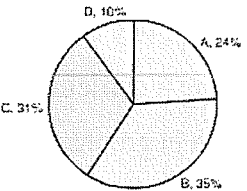
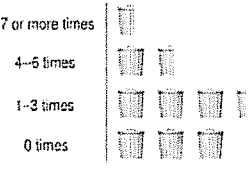
Notes:

A graph gives a visual representation of data. It should display data as truthfully and clearly as possible. Sometimes, a graph is designed to promote a particular point of view. It is very important to look critically at the data in graphs to see if it is misleading.

List below examples of who might want to use misleading graphs and for what purpose.

- government, sway voters
- schools, improve image
- police, " "
-
- etc.

There are many ways in which graphs can be drawn to misrepresent data. Think about how the various graphs below could be manipulated to be misleading.

Type of Graph	Ways to make graphs misleading
<p>Line Graph</p> 	<p>-changing the scales -not starting at zero</p>
<p>Bar Graph</p> 	<p>-changing of scales -width of bars</p>
<p>Double Bar Graph</p> 	<p>-changing of scales -not starting scale at 0 -width of bars</p>
<p>Circle Graph</p> 	<p>-inaccurate -popping out a sector</p>
<p>Pictograph</p> 	<p>-changing the size of the pictures</p>

As a class we'll now go through page 395 to page 398.

Assignment:
Pg. 398-402
#'s 2-8, 10, 13-16