

# ML8 Chapter 1 Problems of the Week Answers

## BLM 1–5 Chapter 1 Problems of the Week

1. Answers will vary. Expect students to choose an appropriate graph for two situations. Example:

- a) double bar graph b) circle graph  
c) bar graph or pictograph. Note that a circle graph would likely be inappropriate since students may choose from a wide variety of flavours. d) bar graph or pictograph

2. a) The graph is distorted. Look for an explanation such as the following: The graph creates the impression that Dana spent more time doing homework than being with friends.

b) Answers may vary. Example: Dana could use the graph to her advantage by giving the misleading impression that she spent more time on homework than either of the other activities.

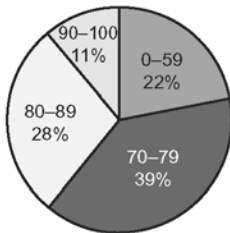
c) Look for a circle graph, bar graph, or pictograph.

3. a)  $140^\circ$

b) Look for a graph based on the following data:

| Score Range | Number | Percent of Total | Central Angle |
|-------------|--------|------------------|---------------|
| 0–59        | 4      | 22%              | $79^\circ$    |
| 70–79       | 7      | 39%              | $140^\circ$   |
| 80–89       | 5      | 28%              | $101^\circ$   |
| 90–100      | 2      | 11%              | $40^\circ$    |

Math Test Scores (18 students)



c) Answers may vary. Students should support their opinion. Examples:

- It is an unfair way to represent the data because the scores from 50–59 were put together with scores below 50.
- The graph represents the data accurately. Each sector is labelled with the category and the percent, and the title includes the number of students.

4. a) Answers may vary. This graph is misleading for several reasons:

- The title for Business is larger than the other titles.
- The bar for Business is twice as large as the other bars.
- The title may cause people to draw false conclusions.

b) Look for improvements such as the following:

- Make all titles the same size font.
- Make all bars of equal width.
- Change the title to reflect the data accurately. Example: Business Graduates Represent 22% of All Graduates