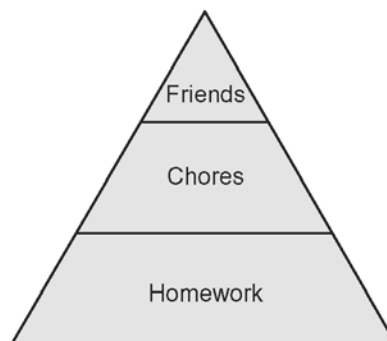


Chapter 1 Problems of the Week

1. For two of the following situations, complete these steps:
- Prepare a survey question that will give you data.
 - Display the data in an appropriate graph.
 - Answer the question asked.
- a) How many hours a day do teens spend sleeping? What about adults?
- b) What percent of students in the class wear glasses? contacts? no eyewear?
- c) What are the four favourite flavours of ice cream of students in the class?
- d) How many students in the class have a female sibling? male sibling? no sibling?

2. This weekend Dana recorded her activities for 20 h. She spent 7 h on homework, 4 h on chores, and 9 h with friends. Dana displayed the data on a triangle.



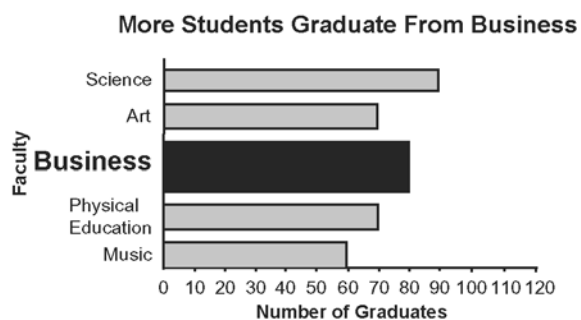
- a) Does the triangle distort the data? Explain.
- b) Does it work to Dana's advantage or disadvantage to display data this way? Explain.
- c) Display the data accurately on a graph of your choice.

3. In Mr. Pem's class, the following percent scores were recorded on a Math test: 48, 50, 56, 57, 70, 72, 72, 73, 76, 77, 79, 80, 82, 86, 87, 89, 90, and 92.

A circle graph is constructed with values ranging from 0–59, 70–79, 80–89, and 90–100.

- a) How many degrees do you need to represent the sector angle for scores from 70–79?
- b) Create the graph.
- c) Do you think that this is a fair way to represent the scores? Explain.

4. Sandy, a business student, created a graph for her school newspaper that showed how many students graduated from the Faculty of Business.



- a) Is this graph misleading? Explain.
- b) How would you improve this graph?