

Show all your details work on separate sheet(s) (8½ x 11):

1. The class scores from a mathematics quiz are as follows:

8, 6, 10, 5, 8, 6, 9, 7, 8, 10, 4, 5, 7, 8, 9, 8, 10, 5, 8, 7

Organize the data in a frequency table.

2. A marine biologist is studying a specific species of fish in a lake. She records the masses of 15 fish, in grams:

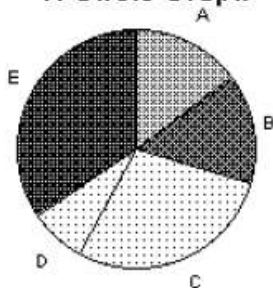
315, 282, 400, 220, 336, 414, 278, 212, 510, 326, 407, 296, 390, 483, 356

The data are going to be represented in a histogram.

Determine an appropriate spread for the class intervals.

3. The following circle graph represents data from 1500 people. The sector angle for category A is 54° . Determine the frequency of category A.

A Circle Graph



4. Explain why the regression line for two variables having a high correlation coefficient might not be a good predictor of further data.
5. Explain why the following picture is misleading:



6. Is the variable, number of accidents per month on several one-kilometre stretches of a highway, continuous or discrete?
7. A researcher is interested in how new training techniques will change track and field. The researcher takes a sample of athletes from all sports, using all training methods, and measures how their performance changes for the next 4 years. Is this an example of a cross-sectional or longitudinal study?
8. Give an example of a data value that is categorical, ordinal, and qualitative.