

Math 153 - Quiz 3

February 9, 2017

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary. YOU MUST WORK INDIVIDUALLY.

1. (5 points) The frequency distribution shown below gives the salaries (in thousands of dollars) of the employees at a small company.

Salary (thousands of \$)	Frequency
12.5–27.9	5
28.0–43.4	13
43.5–58.9	27
59.0–74.4	8
74.5–89.9	3
90.0–105.4	2

- (a) What is the class width?
- (b) What are the class boundaries?
- (c) What is the relative frequency of the third class listed above?
- (d) Using class boundaries along the horizontal axis, construct the corresponding frequency histogram.

2. (5 points) For each of the following situations, tell which type of graph would best display the data. Choose from *dot plot*, *bar graph*, *time-series graph*, *scatterplot*, *pie chart*, *ogive*, *histogram*, or *stem-and-leaf plot*. You may get partial credit if you offer brief explanations.
- (a) Biologists caught, weighed, and released 350 fish. They want to make a graph showing the numbers of fish in the different weight classes.
 - (b) A couple wants to sketch a graph showing how they budget their monthly earnings. They'd like to show how their money is divided among 7 different categories.
 - (c) A teacher graded 25 tests, and they all had scores that were whole numbers between 19 and 65. She wants to display the entire set of scores.
 - (d) Among other things, Pike's dairy sells ice cream, milk, butter, and cheese. A manager would like to show a graph displaying January sales (in dollars) of these products.
 - (e) Oscar randomly selected 100 women. For each woman, he recorded her age and the number of minutes each day that she read. He formed ordered pairs and plotted the data.