

PORTLAND STATE UNIVERSITY
Department of Mathematics & Statistics
FALL TERM 2009

STAT 451/551 Assignment #1 Due Wednesday, October 7
Professor Tableman

1. Refer to the data given in Exercise #29, page 24.
 - (a) Without computer construct
 - i. tally sheet
 - ii. frequency distribution table
 - iii. Pareto chart
 - (b) Use MINITAB to construct
 - i. frequency distribution table
 - ii. bar chart
 - iii. Pareto chart
 - iv. pie chart (%)
2. The data below represent the minimum hourly wage in years. Use MINTAB to draw a time series graph and comment on what you observe.

<u>Year</u>	<u>Wage (\$)</u>
1960	1.00
1965	1.25
1970	1.60
1975	2.10
1980	3.10
1985	3.35
1990	3.80
1995	4.25
2000	5.15
2005	5.15

3. Refer to the Michelson Speed of Light Data.
 - (a) From the histogram construct a frequency distribution table.
 - (b) Give the relative frequency (as %) and the cumulative relative frequency (as %) columns for the table in part (a). Enter these columns into your table above.
 - (c) Without computer, construct an **ogive for the cumulative relative frequency (%)**.

(d) Answer the six questions under the histogram.

4. Use MINITAB to produce a **density scale** histogram of the Michelson data with same cut points.
5. Exercise #71, page 495. Use MINITAB to draw a scatter plot for these 13 data points. Comment.

NOTE: You can copy MINITAB graphs into a WORD document.