

Lab Exercise 5 (Descriptive Statistics)

IT2110 - Probability & Statistics

Week 05

The numbers of shareholders for a selected of large companies (in thousands) are given below.

Company	Number of Shareholders (thousands)
Pan American World Airways	144
General Public Utilities	266
Occidental Petroleum	177
Middle South Utilities	133
DaimlerChrysler	209
Standard Oil of California	264
Bethlehem Steel	160
Long Island Lighting	143
RCA	246
Greyhound Corporation	151
Pacific Gas & Electric	239
Niagara Mohawk Power	204
E.I. du Pont de Nemours	204
Westinghouse Electric	195
Union Carbide	176
BankAmerica	175
Northwest Utilities	200
Standard Oil (India)	173
Atlantic Richfield	195
Detroit Edison	220
Eastman Kodak	251
Dow Chemical	137
Pennsylvania Power	150
American Electric Power	262
Ohio Edison	158
Transamerica Corporation	162
Colombia Gas System	165
International Telephone	223
Union Electric	158
Virginia Electric and Power	162
Public Service Electric & Gas	225
Consumer Power	161

The number of shareholders is to be organized into a frequency distribution.

- 1) Draw a histogram for the above data.
- 2) Draw a histogram using seven classes where the lower limit is 130 and an upper limit of 270.
- 3) Construct the frequency distribution for the above specification.
- 4) Portray the distribution in the form of a frequency polygon.
- 5) Portray the distribution in a less-than cumulative frequency polygon.
- 6) Based on the polygon, three out of four (75%) of the companies have how many shareholders or less?