

Chapter 143

Histograms

Introduction

The word *histogram* comes from the Greek *histos*, meaning pole or mast, and *gram*, which means chart or graph. Hence, the direct definition of "histogram" is "pole chart." Perhaps this word was chosen because a histogram looks like several poles standing side-by-side.

A histogram is used to display the distribution of data values along the real number line. It competes with the probability plot as a method of assessing normality. A histogram is created by dividing up the range of the data into a small number of intervals or bins. The number of observations falling in each interval is counted. This gives a frequency distribution.

A *histogram* is a graph of the frequency distribution in which the vertical axis represents the count (frequency) and the horizontal axis represents the possible range of the data values.

