

23. Read and reorganise the paragraphs

The following lines have been taken from Hardyck, C.D. and Petrinovich, L.F. (1969). *Introduction to Statistics for the Behavioral Sciences*. Saunders Company. Philadelphia USA. pages 5-7.

Read them and decide the adequate order of every paragraph.

Chapter 2. Fundamental Concepts

There may well be some skepticism as to whether real observations do look anything like those in Figure 2-1. Figure 2-2 represents scores on one of the standard test of intelligence, the Stanford-Binet, and Figure 2-3 represents the weight gain of 100 pigs over a period of 20 days.

These rather different examples are presented to emphasize the point that a wide variety of observations in the real world may look very similar to the demonstration set of 1000 numbers.

Assume that we have a set of observations represented by numbers. These observations (the term we will use throughout the text to refer to any numerical measurement or score) could represent a variety of things: the heights or weights of people of a certain age and sex; the incomes earned by people in a give profession; or the test scores in a scholarship examination.

Suppose that we have 1000 observations. If we were to take these 1000 numbers and place them on a graph with the values of the numbers arranged from the lowest to the highest along the horizontal axis and the frequency with which they occur along the vertical axis, we should construct a graph such as is shown in Figure 2-1.

As a matter of fact if these numbers represented any of a variety of observations in the real world, we would expect them to be distributed in a shape similar to the observations in Figure 2-1 [normal distribution of 1000 observations].