The Minitab Manual

Dorothy Wakefield Kathleen McLaughlin

Elementary Statistics

PICTURING THE WORLD

LARSON • FARBER

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Introduction

The MINITAB Manual is one of a series of companion technology manuals that provide hands-on technology assistance to users of Larson/Farber Elementary Statistics: Picturing the World.

Detailed instructions for working selected examples, exercises, and Technology Labs from *Elementary Statistics: Picturing the World* are provided in this manual. To make the correlation with the text as seamless as possible, the table of contents includes page references for both the Larson/Farber text and this manual.

All of the data sets referenced in this manual are found on the data disk packaged in the back of every new copy of Larson/Farber *Elementary Statistics: Picturing the World.* If needed, the MINITAB files (.mtp) may also be downloaded from the texts' companion website at www.prenhall.com/Larson.

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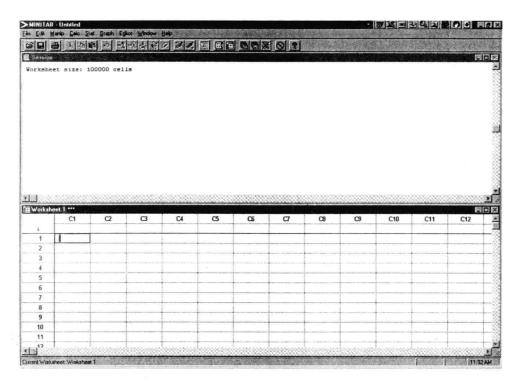
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Getting Started with MINITAB

Using MINITAB Files

MINITAB is a Windows-based Statistical software package. It is very easy to use, and can perform many statistical analyses. When you first open MINITAB, the screen is divided into two parts. The top half is called the Session Window. The results of the statistical analyses are often displayed in the Session Window. The bottom half of the screen is the Data Window. It is called a Worksheet and will contain the data.

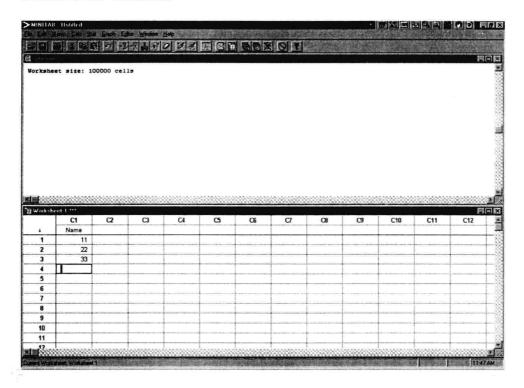


The data will either be entered directly into the Worksheet, or saved worksheets can be opened and used.

Entering Data into the Data Window

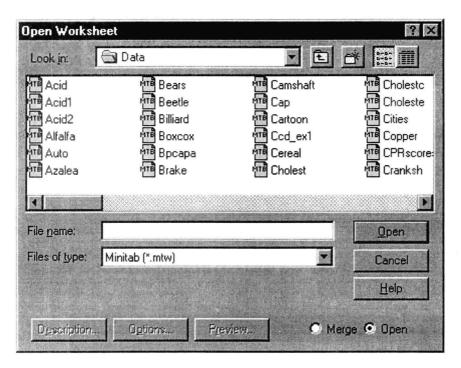
To enter the data into the Data Window, you must first click on the bottom half of the screen to make the Data Window active. You can tell which half of the screen is active by the blue bar going across the screen. In the previous picture, notice that the blue bar is in the middle of the screen, highlighting **Worksheet 1**. This indicates that the Data Window is active. The bar will be gray if the Window is not active. (Notice the Session Window bar is gray.)

In MINITAB, the columns are referred to as C1, C2, etc. Notice that there is an empty cell directly below each heading C1, C2, etc. This cell is for a column name. Column names are optional because you can refer to a column as C1 or C2, but a name helps to describe the data contained in a column. Enter the data beginning in cell 1. Notice that the cell numbers are located in the leftmost column of the worksheet.

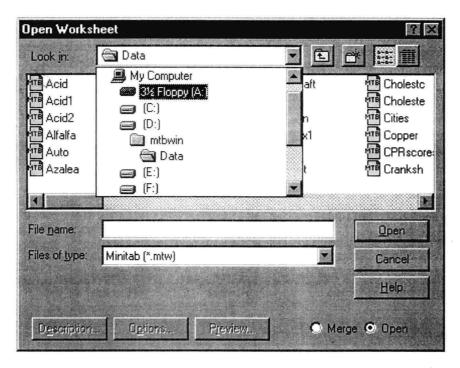


Opening Saved Worksheets

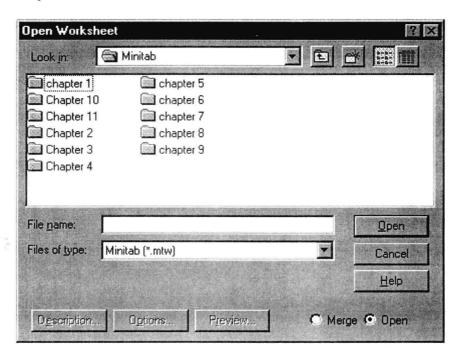
Many of the worksheets that you will be using are saved on the enclosed data disk. To open a saved worksheet, click on File \rightarrow Open Worksheet. The following screen will appear.



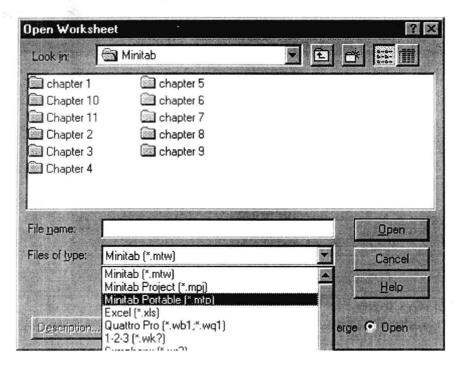
First, you must tell MINITAB where the data files are located. Since the data files are located on the data disk, you must tell MINITAB to Look In the 3 1/2" Floppy (A:). To do this, click on the down arrow to the right of the top input field and select the floppy drive by double-clicking on it.



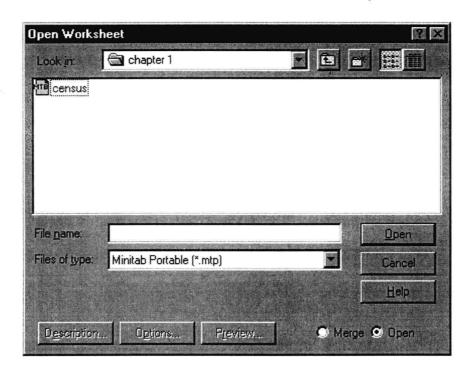
When you do this, you should see three folders listed. Select the MINITAB folder with a double-click. Now you should see a folder for each of the eleven chapters of the book.



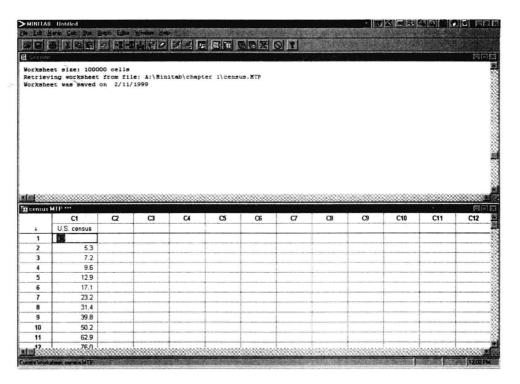
All data files are saved as MINITAB Portable worksheets and have the extension .mtp. Click on the down arrow for the field called Files of type and select Minitab Portable (*.mtp).



Now, select the folder called chapter 1 (by double-clicking) and you should see all the MINITAB worksheets for Chapter 1.



As you can see, Chapter 1 has only one worksheet saved to disk. To open the worksheet **census**, double-click on it and the worksheet should appear in the Data Window.



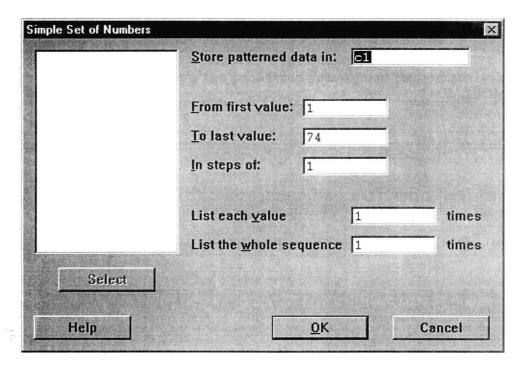
You are now ready to begin analyzing the data and learning more about MINITAB.

Introduction to Statistics



Technology Lab (pg. 22-23) Generating Random Numbers

To select 8 numbers randomly from the numbers 1 to 74, first store the numbers 1 to 74 in C1. Click on Calc → Make Patterned Data → Simple Set of Numbers. You should Store patterned data in C1. The numbers will begin From the first value 1 and go To last value 74 In steps of 1.



Click on **OK** and the numbers 1 to 74 should be in C1 of the Data Window.