

## Stat 200: Introductory Statistics

### Using Excel for Statistical Analysis

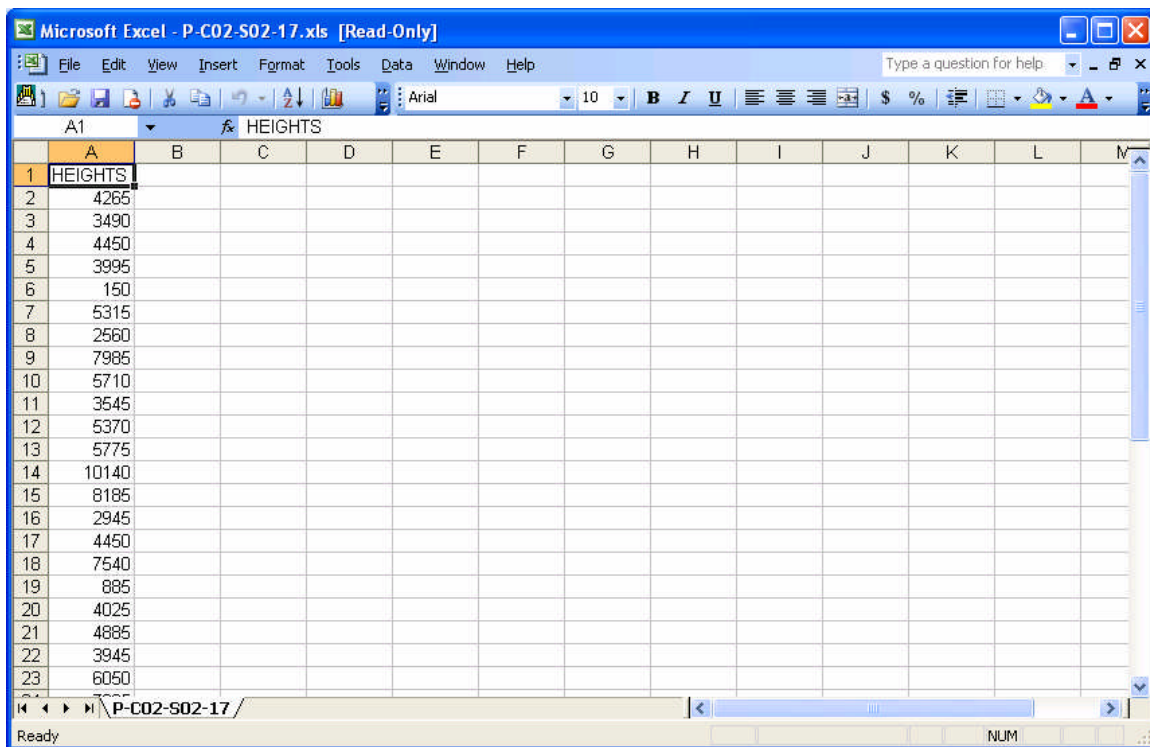
## Chapter 3: Excel Basics

### Cells

Unless otherwise stated, all examples in this chapter will be based on Problem 17, page 44 of Bluman's text, Elementary Statistics: a step by step approach, (5<sup>th</sup> edition). Since this is in section 2.2, the file name for the data file on the textbook CD is **P-C02-S02-17.xls**

At your computer, open Excel and then open the data file as shown in the last chapter. Save the file on your computer so that it is no longer read only.

Once you have done this, your Screen should look something like this:



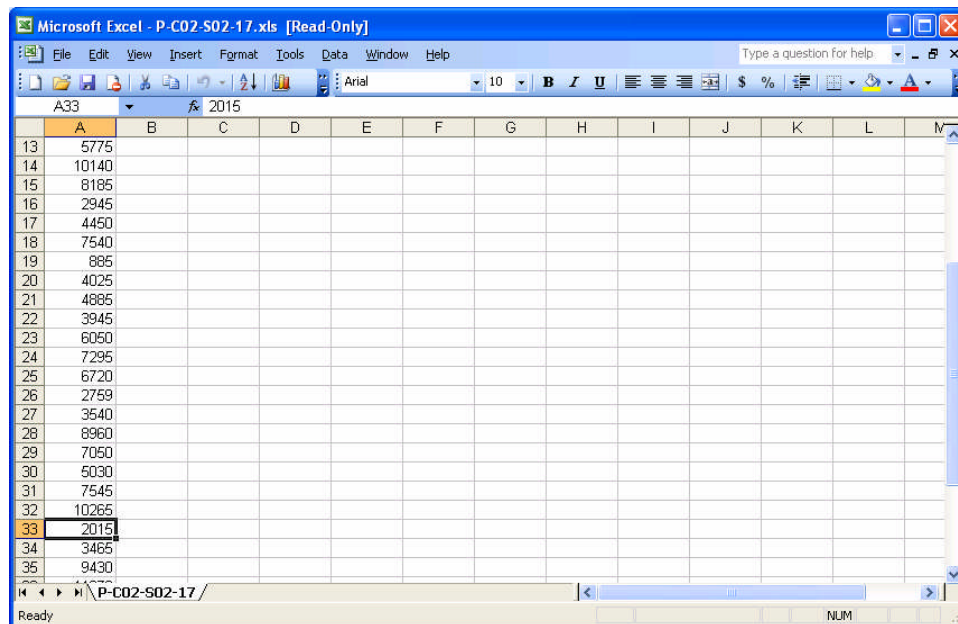
The screenshot shows a Microsoft Excel window titled "Microsoft Excel - P-C02-S02-17.xls [Read-Only]". The spreadsheet has a single column of data in column A. The first cell, A1, contains the text "HEIGHTS". The subsequent cells, A2 through A23, contain numerical values representing heights. The status bar at the bottom indicates "Ready" and "NUM".

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	HEIGHTS												
2	4265												
3	3490												
4	4450												
5	3995												
6	150												
7	5315												
8	2560												
9	7985												
10	5710												
11	3545												
12	5370												
13	5775												
14	10140												
15	8185												
16	2945												
17	4450												
18	7540												
19	885												
20	4025												
21	4885												
22	3945												
23	6050												

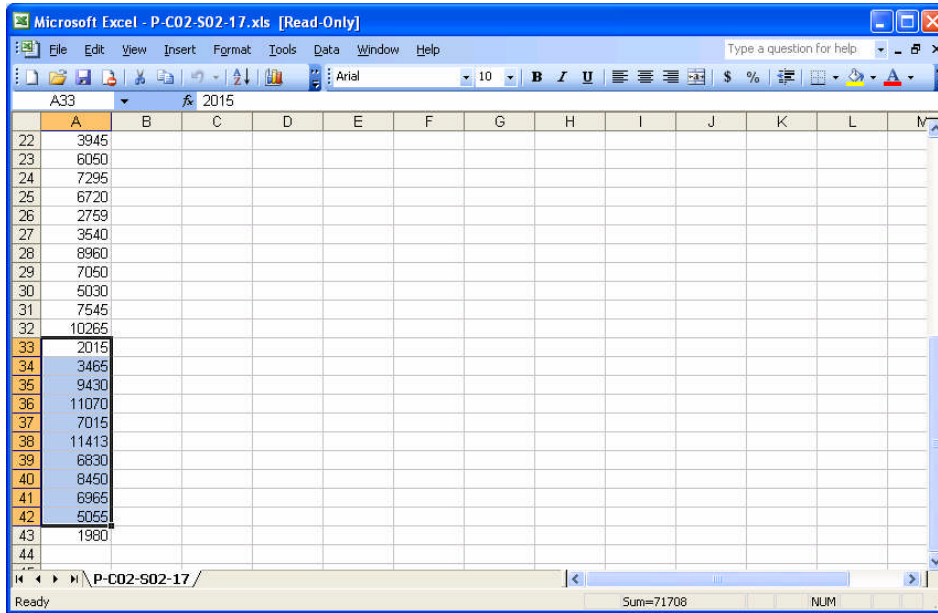
You will see that the data is listed in one column, column A. The data name, *Heights*, is in the first cell (cell A1). The data set is listed, one observation to a cell, in the cells A2 to A23 (A2:A23)

## Selecting and Moving Cells

You can select any cell in an Excel worksheet by clicking on it. If you click on one cell, the cell is marked by border and the row and cell coordinates are highlighted in the margins of the workbook. Here, cell A33 has been selected.



To select a group of cells, click in the first of the required cells and, holding down the left mouse key, drag your mouse in the direction of the remaining cells that you wish to highlight. To select cells A33 to A42, for example, click on A33, hold the left mouse key down and drag the cursor to cell A42.

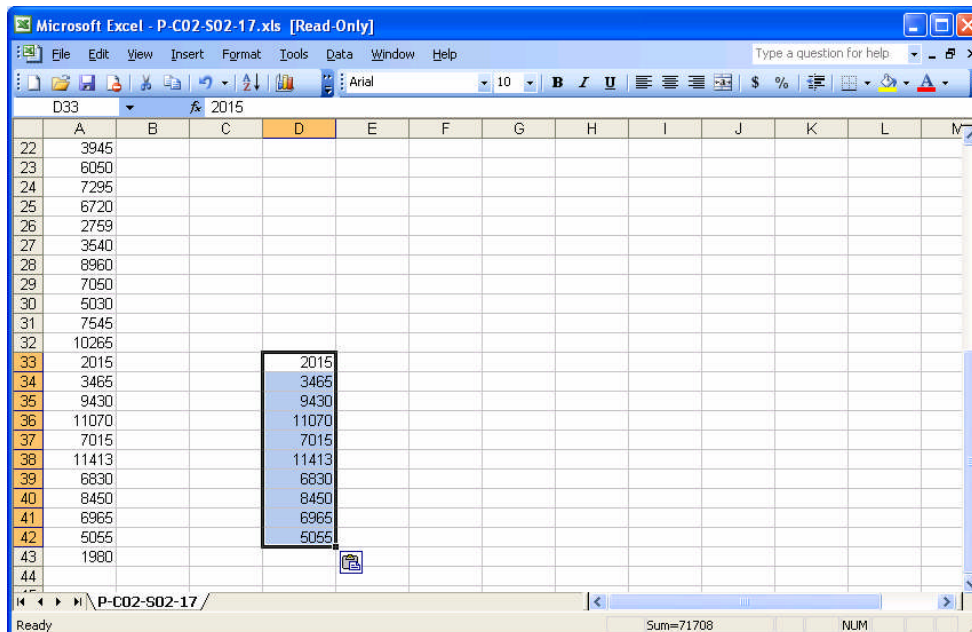


## Cut and Paste

Just like selecting text in *Word*, the marked cells can be edited using the standard Windows cut and paste functions. **To copy cells** to another position in the Worksheet,

- Highlight the cells required, click the right mouse key and select *Copy*.
- Move the cursor to new position of the first cell, click the right mouse key and select *Paste*.

In the screen shot below, the cells A33:A42 have been copied to cells D33:D42.

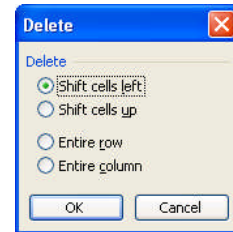


If you wish to **move a set of data**,

- Highlight the cells required, click the right mouse key and select *Cut*.
- Move the cursor to new position of the first cell, click the right mouse key and select *Paste*. The cells in the previous location of the data set revert to empty.

To **delete data** from cells without relocating it elsewhere in the worksheet,

- Highlight the cells required, click the right mouse key and select *Delete*.
- Select the required option from the dialog box and press OK.



Don't forget **the Undo function!** To undo anything you have just done in an Excel worksheet, click on the Undo icon in the tool bar (an arrow pointing back.) This will reverse your last action. Clicking *Undo* repeatedly will undo your previous actions in reverse order (last done, first reversed.)

## Insert a New Worksheet in the Workbook

To insert a new page in the Workbook, click on *Insert* in the tool bar and click on *Worksheet*. The new worksheet will be inserted. To reorder the worksheets in the workbook, click on the worksheet's tab at the foot of the page and drag horizontally to the new location.

## Renaming Worksheets

To rename a worksheet, right click (i.e. click using the right button on the mouse) on the tab at the bottom of the worksheet. Select *Rename*. Type the new name, then click anywhere in the worksheet to finalize the change. Save your worksheet.