## **Using Excel For Calculations**

The data was entered in columns labeled  $\mathbf{x}$  (cells B2-B11) and  $\mathbf{y}$  (cells C2-C11) (see figure 1).

Multiplication: The values in column D result from the multiplication of the values in column B by the values in column C. For example, in cell D2 the formula entered was: =B2\*C2 (To fill column D with the products of column B and C, highlight the cells D2 to D11 and under <u>E</u>dit on the menu bar click Fill Down or use Ctrl D.

Division: The values in column E result from the division of the values in column B by the values in column C. For example, the formula entered in cell E2 was: =B2/C2

Using an exponent: The values in column F are a result of squaring the values in column B. For example, in cell F2 the formula entered was:  $=B2^{2}$  (You could have also entered B2\*B2).

Taking the sum of a column (or row) of numbers: In row 13, the sum of columns B through F are calculated. For example, in cell B13 the formula entered was: =sum(B2:B13) (To fill row 13 with the sums of columns C through column F, highlight cells B13 to F13 and under <u>E</u>dit on the menu bar click Fill Right (or use Ctrl R)).

Taking the average of a column (or row): In row 14, the averages of columns B through F are calculated. For example, in cell B14 the formula entered was: =average(B2:B13)

Taking the standard deviation of a column (or row). In row 15, the standard deviation of columns B through F are calculated. For example, in cell B15 the formula entered was: =stdev(B2:B11)

Taking the mean deviation of a column (or row): In row 16, the mean deviation of columns B through F are calculated. For example, in cell B16 the formula entered was: =avedev(B2:B11)

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Figure 1: An example of an Excel Spreadsheet used for calculations.