

This first homework is a warm up to thinking about functions. It is the only homework in Excel; all problems can be completed with standard Excel functions (formulas that begin with =). A list of Excel functions is found here: <http://www.excelfunctions.net/ExcelFunctions.html>.

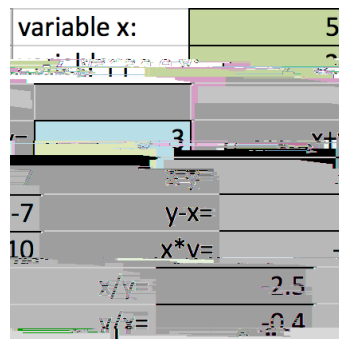
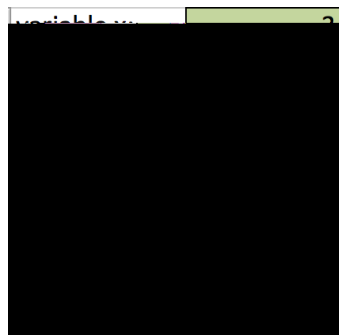


Note that there are **two sheets**, one for each part. Write an estimate of the time it took to complete each part at the bottom of each spreadsheet.

## Part 1: Using Excel to Manipulate Numbers and Strings

A *variable* (e.g.,  $x$ ,  $y$ ,  $A$ ,  $B$ , ...) is a symbol that represents a value. In the Excel spreadsheet, green cells *assign* a value to a variable. For example, the value 5 is *assigned* to the green cell B12; thus, when we refer to the variable B12 we mean the value 5. A *function* is a cell that takes numbers (e.g., 5) or references to other cells (e.g., B12) and computes a new value. In Excel, these functions will begin with an equals sign.

**Manipulate numbers in Excel.** Write functions in the blue cells that calculate the expressions in the first column using the variables  $x$  and  $y$ . When you enter different numbers in the green cells, the blue cells should automatically update:



What values of of the x and y

## HW1.2: Using Excel to Calculate Hamming Distance