**MAT1372**

**Project #4**

**Due Date: Tuesday, March 25, 2014**

**Maximum points on this project: 8 points**

Submit **one** EXCEL file: FirstName LastName-Project 4-MAT1372-Sp2014

Submit by the due date to: shan@citytech.cuny.edu

To get full credits for the project, you must:

1. Turn in the project on time. One point will be deducted for “each day” (including weekends and holidays) that the project is late.
2. State the goal (or the problem) of the project.
3. State the process, including EXCEL commands used.
4. State the results.

Go to New York Lottery website: [www.nylottery.ny.gov](http://www.nylottery.ny.gov)

Use the information on Mega Millions to do the following:

1. Let X be the random variable which represents the amount of wining when $1 (1 ticket) is played. What are the possible values for X? Assume Jackpot is $400 million.
2. Find the probability of winning **Mega Millions** at each prize level. (Use chances of winning posted on the website to determine the probabilities) Construct the probability distribution for the amount of winning in **Mega Millions**.
3. Find the expected winning (expected value) in **Mega Millions**.

Show Excel formulas for the calculations.