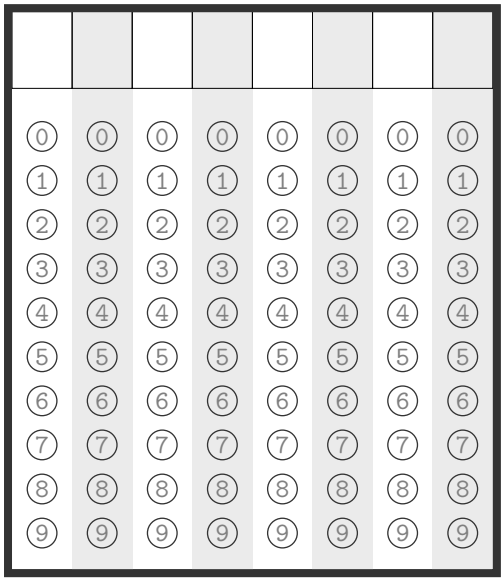
MTH 337 B
QUIZ 3 SAMPLE

Name:

UB Person Number:



Instructions:

- If the first column of the quiz contains Python code, in the second column write the output that this code produces when executed.
- If the second column contains a description of some Python operation, in the first column write the code that will perform this operation.
- Treat the first column as a sequence of Jupyter Notebook code cells that are executed from top to bottom. This means e.g. that you import some module in one cell, then you don't need to import it again in the following cells. If you define some variable or function in one cell, then you can use it in the following cells.

	Python Code	Result	
1.	`mylist = [5, 4, 3, 2, 1]` `print(mylist.index(2))`		

2.	`a = [x*(x+1) for x in range(1,5)]`
	`print(a)`
	`print(max(a))`		

3.	`a = ["aly","bob","charlie","dave"]`
	`b = [s for s in a if len(s) == 3]`
	`print(b)`		

4.	`#x = 1`
	`x = 2 # 3`
	`print(x)`		

5.		Let `plist` be a list of all prime numbers smaller than 1000. Use `plist` and list comprehensions to produce a list of squares of all primes that are smaller that 1000 and whose last digit is 1.	
6.		For the remainder of this quiz assume that the following code has been executed: `import matplotlib.pyplot as plt` Write code that plots points with coordinates (0, 1), (1, 2), and (2, 3) as red dots, and points with coordinates (4, 5) and (6, 7) as green green.	
7.		Add the title "Quiz 3 plot" to the above plot.	
8.		Set the range of the x-values displayed on this plot to $0 \leq x \leq 10$.	