MTH 337 Intro to Scientific computing
SAMPLE QUIZ #4

Spring 2021   Instructor: Simone Cassani

The Sample Quiz is for you to practice for the quiz that will be at the end of class on Monday on Gradescope.

(1) Assume for the remainder of the quiz that the following command has been run
`import matplotlib.pyplot as plt`
Write the code necessary to plot the points (1, 2), (2, 3), (3, 4) as magenta squares, and (5, 11), (3, 3) as green triangles. (do not forget `plt.show()`)

(2) Add the label 'x values' on the x axis and the label 'y values' to the right axis of the plot produced in question 1.

(3) Add the title 'My Title' to the plot produced in question 1.

(4) Define a function that takes a list of integers as its argument, and returns the product of the second and last element of the list. (You can assume that the list has at least 3 arguments)

(5) Given the nested list `mylist=[[1,2,11],[3,4,7],[5,6,13]]`, write the code to get the elements `[1,2]`, and the list `[3,5]`

(6) The following code has one or more errors in it. What is wrong with it?
```
x=[1,2,3,4]
y=[5,6,7]

plt.plot(x,y,'r.',linewidth=4)
plt.show()
```

(7) Define a function that can be called with one or two arguments. If called with two arguments it returns the difference of the first minus the second one. If called with one argument it returns the argument itself