

MTH 337, SAMPLE QUIZ #7

Spring 2020

Professor: S. Cassani

You have 10 minutes to complete the quiz.

Name: _____

(Also print name on back upper right corner of quiz.)

Max score: 10

	Python Code	Result	
1		Write the code that creates an one-dimensional array <code>a</code> with numbers from 0 to 8. Print to screen the array containing the values of the array greater than 2, and not greater than 6.	
2		Write the code that creates a 3x4 array <code>a</code> with numbers from 0 to 11. Use boolean indices to set all of the entries of <code>a</code> , that are less than 2 or greater than 8, equal to 0.	
3		<p>For the remainder of this quiz assume that the following code has been executed:</p> <pre>import matplotlib.pyplot as plt import numpy as np imga=np.random.rand(5,4,3)</pre> <p>write the code that makes a copy of <code>imga</code> (call the copy <code>imgb</code>), and changes to black all the pixels where the <u>red</u> component of the image is greater than 0.5. Use boolean indices.</p>	
4		Write the code that makes a copy of <code>imga</code> (call the copy <code>imgc</code>), and changes to 1 the <u>blue</u> component of all the pixels where the <u>green</u> component of the image is between 0.1 and 0.7. Use boolean indices.	
Total Points:			