

# MTH 337 Intro to Scientific computing

## SAMPLE QUIZ #6

Fall 2020

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

- (1) Write the code to generate a `numpy` array with 6 elements all equal to 4
- (2) Given the `numpy` array `myarray`, write the code to compute the *sine* of all the numbers in the array
- (3) Produce a `numpy` array `x` that contains 101 equally spaced points for the interval  $[-2, 2]$
- (4) Produce a `numpy` array `w` starting at 4.01, ending at 4.71 with a step of 0.1
- (5) Write code that creates a plot of the function

$$f(x) = x^2 + 1 \text{ for } -1 \leq x \leq 1$$

Use at least 100 points

- (6) Write code that creates a plot of the function

$$f(x) = \tan x \text{ for } 0 \leq x \leq \pi$$

Use at least 1000 points

- (7) Write a statement that generates a subplot located in the lower left corner of a  $3 \times 3$  grid (just a statement generating the subplot, don't plot anything in it).