Name:

Date:

**Exercise 1:**

* Paste screenshots of your console showing the net charge of “DIAK” at pH 7 and pH3.
* Predict the charge of “DIAK” at pH 12.

**Exercise 2:**

* Peptides that eluted in Fraction 1:
* Peptides that eluted in Fraction 2:
* Peptides that eluted in Fraction 3:
* Did any peptides retain on the column at pH 3? Why or why not?

**Exercise 3a:**

* Paste a screenshot of your modified code that prints out the charge of each peptide at pH 7.

**Exercise 3b:**

* Write out answers to the three questions:
  + What does the code do? What are the inputs and what are the outputs?
  + What do we want the code to do? What inputs do we have, and what do we expect as outputs?
  + What parts of the existing code already do what we want, and what parts need to change?
* Paste a screenshot of your modified m\_over\_z() function for MALDI.
* What are the expected MALDI m/z values for each peptide from Exercise 2?

**Exercise 4a-c:**

* For one or more of these exercises, copy and paste the required screenshots below.