

Name: _____ Section: 1 2 3 4

1 = Stouder, 2nd-3rd periods. 2 = Stouder, 4th-5th periods. 3 = Mutchler, 7th-8th periods. 4 = Rupakheti, 9th-10th periods.

Use this quiz to help make sure you understand the videos/reading. **Answer all questions.** Make additional notes as desired. **Not sure of an answer?** Ask your instructor to explain in class and revise as needed then. **Please print two-sided if practical.**

Throughout, where you are asked to “circle your choice”, you can circle or underline it (whichever you prefer).

Textbook Reading: Section 6.2 – List Operations (pages 284 – 290)

1. When the code snippet below is executed, what gets printed?

```
numbers = [5, 9, 2]
numbers.append(3)
print('Appended:', numbers)

numbers.insert(2, 1)
print('Inserted:', numbers)

popped = numbers.pop(3)
print('Popped:', popped, numbers)

numbers.remove(9)
print('Removed', numbers)
```

Output (fill in the blanks):

Appended: _____

Inserted: _____

Popped: _____

Removed: _____

2. If a and b are lists such that $a + b == b + a$, is it necessarily true that $a == b$? Yes No (circle your choice)
3. Suppose that *numbers* is a non-empty list of numbers. Write a **single** expression (NOT an explicit loop!) that computes the average of the numbers in the list.

Textbook Reading: Section 6.3 – Common List Algorithms (pages 290-297)

4. Suppose that x and y are two variables. Write statements that swap their values. For example, if x is **2** and y is **8**, then after your statements, x should be **8** and y should be **2**.

Textbook Reading: Section 6.4 – Using Lists with Functions (pages 297-303)

5. Write the complete definition (including the header line) of a function **fill** that fills an existing list with a given value (i.e., replaces the current value in each list position). For example, **fill(scores, 10)** should replace each element of the list **scores** by the number **10**.

6. Consider the following function that reverses a list. **Answer here:** _____

```
def reverse(values):  
    result = []  
    for k in range(len(values)):  
        result.append(values[len(values) - 1 - k])  
  
    return result
```

If the list **scores** initially contains the numbers 1, 4, and 9 (in that order), what does **scores** contain after the call **reverse(scores)**? (*Hint*: careful, this is a little tricky!)

7. List a few operations that you can do with a list that you cannot do with a tuple.