HW6

Name:_____

1. Exercise 5.3.2 (pg.185) in the book.

2. Exercise 5.5.1 a) and b), pg. 197.

3. Perform Mergesort on the following numbers. You may just show the result of the merges, but start with the initial "sorted" single item lists (i.e. you can do like fig. 5.2 but skip the part above the middle – that's just the calls to Mergesort).

4 2 6 8 7 3 1 5

4. Perform Quicksort on the following list of numbers.
    a. Use Hoare Partitioning
        i. select the left position as pivot every time.
        ii. You should show the steps of quicksort as in fig. 5.3. You can scan multiple items at a time.
    b. You may assume the existence of an Insertion Sort that you may call if Quicksort gets called on an array of size 3 or less and sorts it in one step.
    c. Consider using a spreadsheet.

5 1 9 2 4 6 8 3 7