CSc 127B — Introduction to Computer Science II
Fall 2015 (McCann)

In-Class Activity #8: Individual Quiz

Name: _____ Section Leader: _____

Directions: **Working alone**, answer the following questions to the best of your *individual* ability. We encourage you to show your work, to help us understand your thought process. When you are done, you may leave; please hand this page to one of the class staff on your way out. Week 11 (2015/11/04)

1. Consider the problem of converting a normal singly-linked list into a circular linked list.

   (a) Draw a "Before" picture of a singly-linked list of three nodes, each holding a different real number. Include a head reference in your picture.

   (b) Draw an "After" picture of the same three-node list, showing what it looks like after it has been converted into a circular list. Again, show the head reference.

   (c) Name a special case of a "Before" list that a method performing this conversion to a circular list would need to handle correctly.

   (d) Write a complete Java method that accepts a reference to the first node of a linked list of `Doubles` and adjusts the list to be a circular linked list, returning a reference to last node (the tail node) of the list. Assume a class named `LLNode<E>` is available, with the usual getters and setters (`getData()`, `getNext()`, `setData(E)`, and `setNext(LLNode<E>)`). If the given reference is null, return null.