Linked Lists

Name _____ NetID _____

```
class LinkedList {
private:
  struct Node {
    int val;
    Node* next;
  };
  Node* head;
};
```

1. How big is an empty LinkedList object? _____
2. How big is a pointer in C++ on a 64-bit computer? _____
3. How much memory is each Node? _____
    - How would you find out how big a Node is on your computer?
4. What is the complexity of...
    1. inserting n nodes into the list using addStart? O(_____)
    2. inserting n nodes into the list using addEnd? O(_____)
    3. If we have a Node*, inserting just after it in the list? O(_____)

```
class LinkedList2 {
private:
  struct Node {
    int val;
    Node* next;
  };
  Node* head;
  Node* tail;
};
```

5. What is the difference with LinkedList2 vs LinkedList?