1. Using pointers and new, create a 2D array of integers. Fill it with 0.

2. STL data types have a function `end()`. What does it return?

3. What is the dereference operator?

4. What is the “address of” operator?
5. What is the difference between passing by pointer, and passing by reference?

6. What is the stack, in the context of a process memory space?

7. What is the heap (aka freestore), in the context of a process memory space?

8. Stop! Who would cross the Bridge of Death must answer me these questions three (well, four), ere the other side shall see.
   (a) What...is your name?
   
   (b) What...is your favorite color?
   
   (c) What...is your quest?
   
   (d) What...is the airspeed velocity of an unladen swallow?
9. What must always be done to variables created with `new`?

10. There are 2 ways discussed in class of putting a variable on the heap. What are they?

11. Give a general outline of a recursive function.

12. Govern three ways to refer to the last element in a vector.

13. What are some advantages and disadvantages of recursion over iteration?
14. Give three uses for the * operator. Name and describe each use.

15. Describe the concept of namespaces.

16. Who said “Of what consequence are you now? These people, this world, they are nothing - the universe is power, pure unstoppable power - and I am that force, I am that power.”?

17. Assume proper headers have been included, but no using directive or declaration. Write a definition of an iterator for a vector of ints that is initialized to point to the first member of the vector vec.

18. Why should you avoid using namespace ns; when working with multiple namespaces?
19. Give 2 examples of common namespaces.

20. What is recursion?

21. What parts of a class are not inherited via public inheritance?

22. When a derived class inherits from a base class, how is the base class constructor called?

23. What are some benefits of object oriented programming and inheritance?
24. If a namespace of the same name is created in multiple files, what is the relationship between those namespaces?

25. Describe the inheritance relationship among the stream I/O classes.