CIS 121 - Quiz 13 - Friday, July 25, 2003

Name: ___________________________ StudentNumber: ___________________________

1. (2 pts) If we want to sort the array 18 15 12 30 21 5 7 17 with Quicksort, what is the first swap that is made and why?

2. (2 pts) If we have a sorted array with 1024 elements, approximately how many searches will we need to make to find an element using the Binary Search?

3. (2 pts) If we are sorting an array with 1000 elements using QuickSort, then in the best case we will make approximately ________________ comparisons, and in the worst case we will make approximately ________________ comparisons.

4. (2 pts) An example of an O(N²) algorithm is ________________________, and an example of an O(N) algorithm is ________________________.

5. (2 pts) True/False _____ The Binary Search can be used on any array. If false, explain why.