This quiz has 6 questions. You will answer only 4 of them, for **25 points each**. Number each of your answers, and draw a line between each to make the separation clear.

1. Compare and contrast the running-time characteristics of a linear search versus a binary search.
2. Explain the approach shared by the selection sort or bubble sort algorithms, and the key characteristics of these algorithms.
3. Explain the approach used by and run-time characteristics of a sorting algorithm like the quick sort.
4. Consider a bookshelf full of children’s books, in alphabetical order by the author’s last name. You want to find a book called “Knuffle Bunny.” (a) What is your best strategy to find this book? Use big-O notation to explain. (b) What might change your answer?
5. (a) Explain what it means to say that Facebook is a data-driven web application. Use Facebook as an example to explain the concepts of a (b) database, (c) tables, and (d) records.
6. (a) What is the DMCA anti-circumvention law, and how does it apply to copyrighted materials? (b) Explain how this law applies to playing DVD movies on a Linux computer.