# Chapter 19 Homework

1. What key aspect of both the binary search and the merge sort accounts for the logarithmic portion of their respective Big O's?
2. If a sorting or search algorithm is easy to understand it is usually \_\_\_\_ to implement and \_\_\_\_ efficient than a more complicated sorting or searching algorithm.
3. If an algorithm is completely independent of the number of elements in the array, it is said to have a(n) \_\_\_\_ run time.
4. A Big O of *O*(*n*2) is said to have a(n) \_\_\_\_\_ run time.
5. In what sense is the insertion sort superior to the merge sort? In what sense is the merge sort superior to the insertion sort?