1.2;
The merge sort algorithm divides the array into halves logarithmically (log n) and merges them in linear time (O(n)) at each level. Thus, the overall complexity is O(n log n), combining the logarithmic division and linear merging processes.

1.3:
Step 1: divide the array
Step 2: sorts each half recusrsivley
Step 3: Merges the sorted halves

1.4:
Yes, the number of steps in the merge sort process for the array `[8, 42, 25, 3, 3, 2, 27, 3]` is consistent with the complexity analysis of O(n log n).