

Name: _____

Group (A/B): _____

Merge Sort Quiz

- ☐ Pre-learning
- ☐ Post-learning

Answer each of the following questions by circling the correct answer.

1. Which technique does merge sort use?
 - a. Dynamic programming
 - b. Greedy
 - c. Backtracking
 - d. Divide and conquer
2. Merge sort is in-place by default.
 - a. True
 - b. False
3. Which of the following is not a variant of merge sort?
 - a. Linear
 - b. Top-down
 - c. In-place
 - d. Bottom-up
4. Merge sort is a stable sorting algorithm.
 - a. True
 - b. False
5. What is the average time complexity of merge sort?
 - a. $O(n)$
 - b. $O(n^2)$
 - c. $O(n \log n)$
 - d. $O(1)$