Merge sort:

30 13 22 90

[30 13] [22 90]

[30] [13] [22] [90]

[13 30] [22 90]

[13 22 30 90]

Bubble sort:

30 13 22 90

[13 22 30] 90

[30 13] 22 90

[30] 13 22 90

Selection Sort:

30 13 22 90

13 [30 22 90]

13 22 [30 90]

13 22 30 [90]

Ans:

- Merge sort: 9 comparisons and 4 element moves

- Bubble sort: 3 comparisons and 3 element moves

- Selection Sort 3 comparisons and 3 element moves

- Bubble sort is the best performing method for sorting this array of integers

- Merge sort would be the worst arrangement of this sequence