## **CONCEPT: SUBSTITUTION COMPARISON**

When given a substitution reaction, use the following two factors to determine the mechanism:

1. Nucleophile Strength

$$S_N^1 =$$
\_\_\_\_\_

$$S_N^2 =$$
\_\_\_\_\_

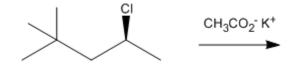
2. Leaving Group Substitution

$$S_N^1 =$$
\_\_\_\_\_

$$S_N^2 =$$
\_\_\_\_\_

**EXAMPLE:** Provide the mechanism and final products for the following reactions.

a.



b.

