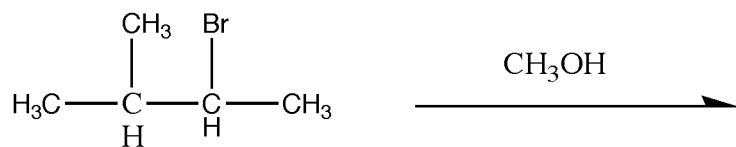
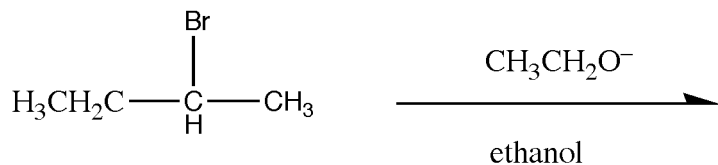
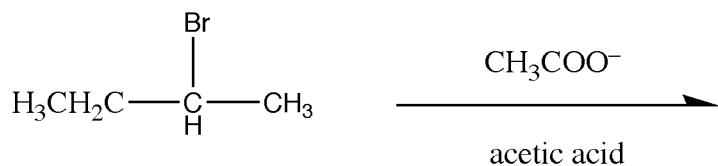
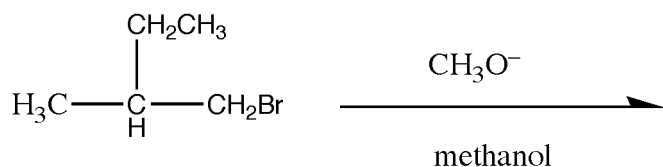
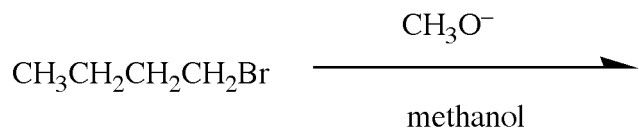
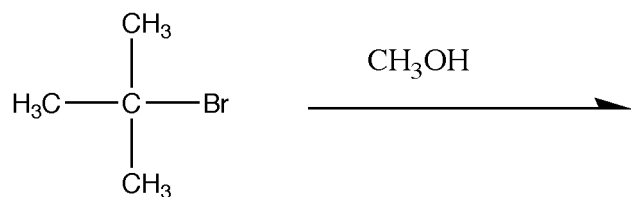
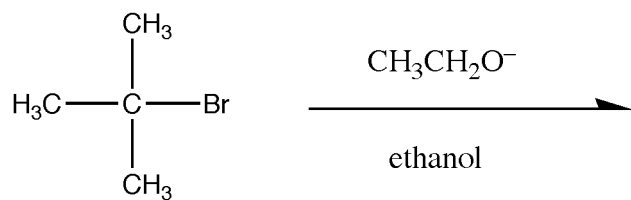


Exercise 6: A summary of substitution and elimination reaction of alkyl halides

1. Predict the **major product(s)** for the following reactions and give the **type of reaction** (E1, E2, S_N1 or S_N2):





2. What general statement can you make about all of the reactions above if, instead of being bromides, the molecules were **chlorides**?

3. Give the reagents/conditions for the following **two-step synthesis**. Be warned, the second step is an anti-Markovnikov addition.

