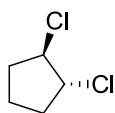


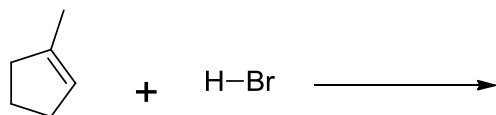
1. Name the following compounds (3 points each, 6 total)



Include cis/trans

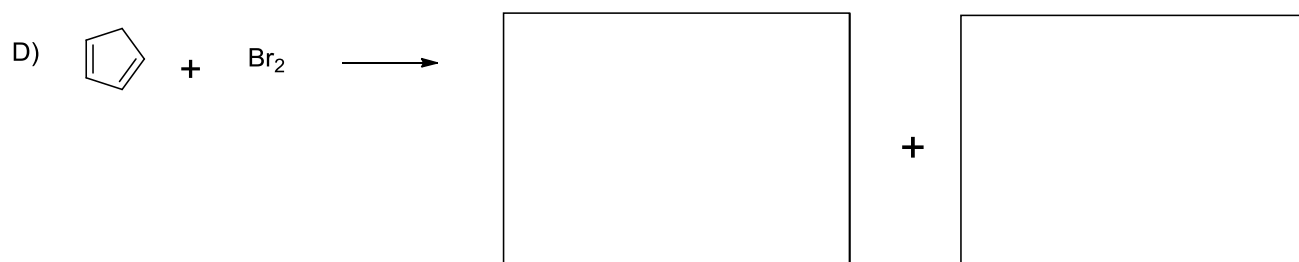
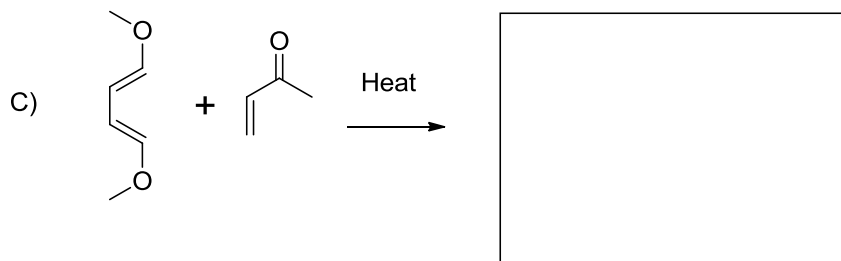
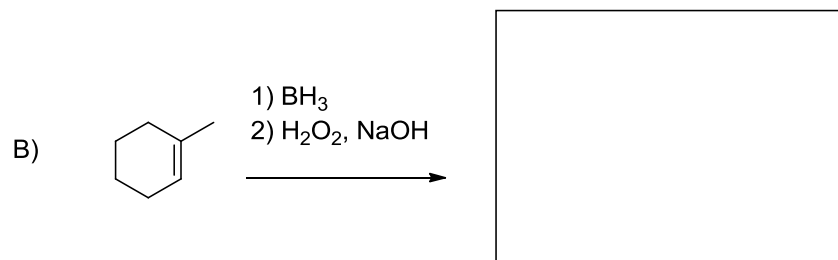
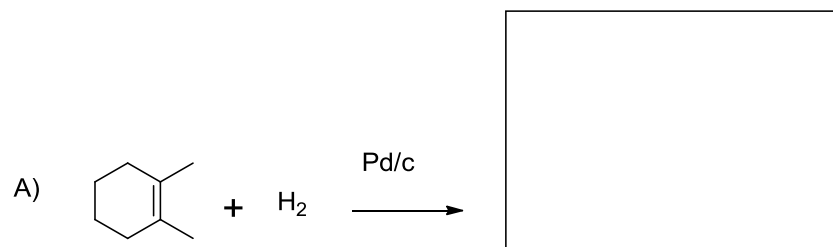


2. Complete to following addition reaction (3 Points).



3. Draw the energy diagram for the above reaction. Include the following; transition states, ΔH , reactants, products, and activation energies assuming an exothermic reaction (6 points).

4. Fill in the products for the following reactions (2 points each, 10 points total).



1,2 addition product

1,4 addition product