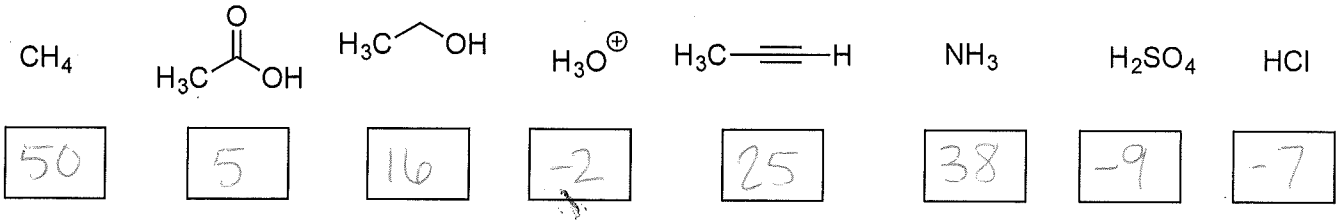
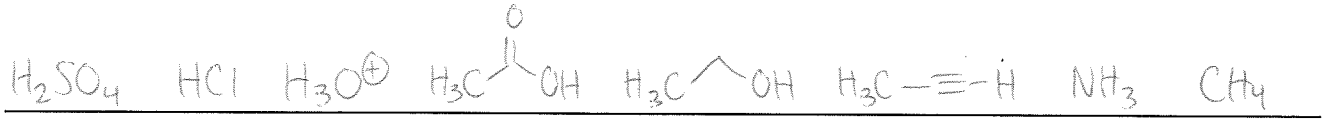
Worksheet 0 -- Chem 51C -- Jarvo

Most of these concepts are review from prior quarters of Chem 51

1. Provide pKa's for the following compounds. Arrange them on a number line according to their pK_a

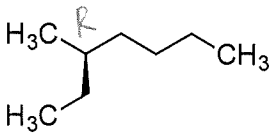


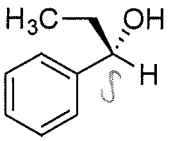
50	5	16	-2	25	38	-9	-7

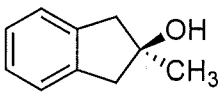


-10 50

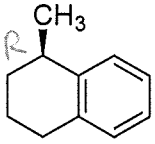
2. Assign the absolute configuration of the following compounds:

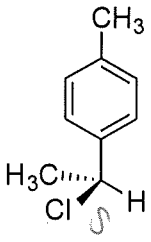


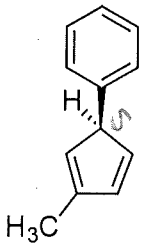




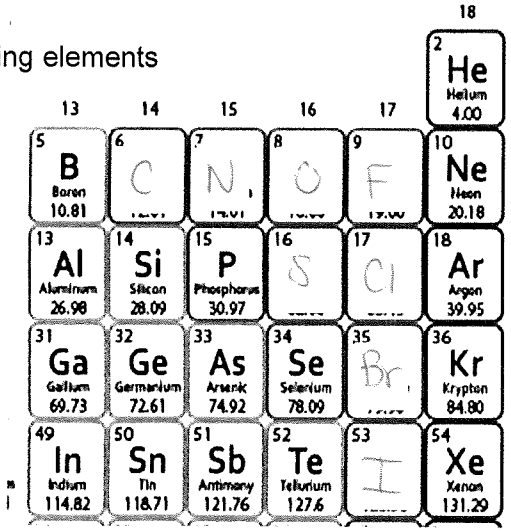
achiral



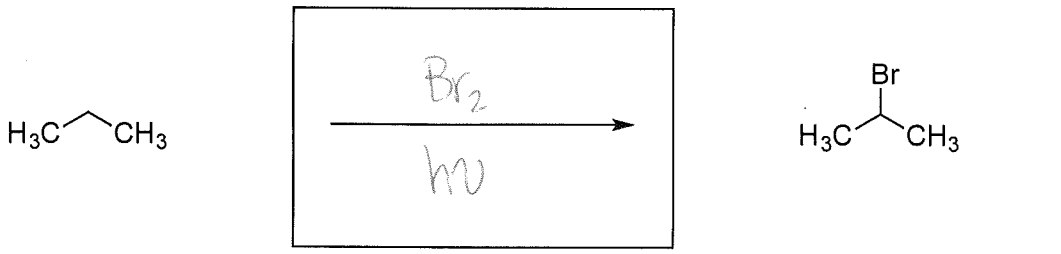


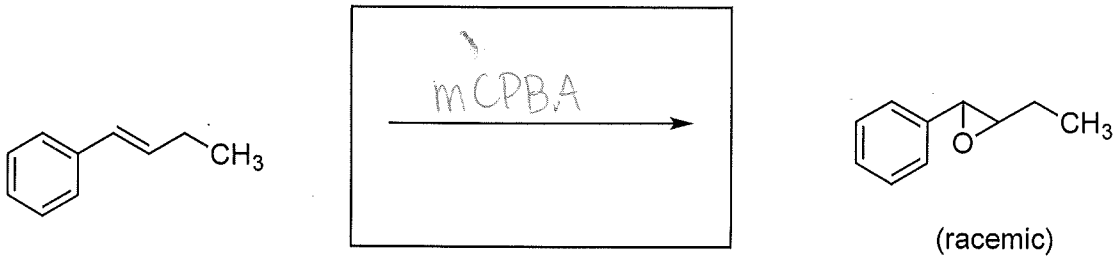


3. Fill in the periodic table with the mising elements

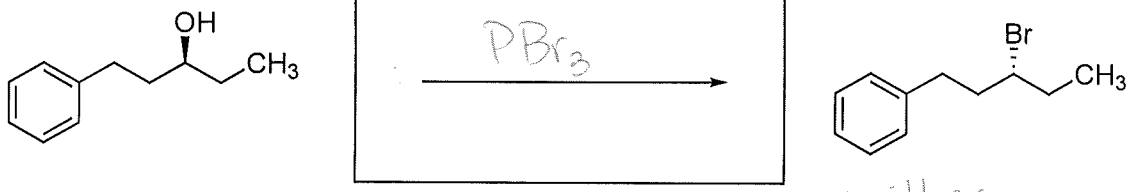


4. Fill in the boxes with the appropriate starting material, reagent or major product.



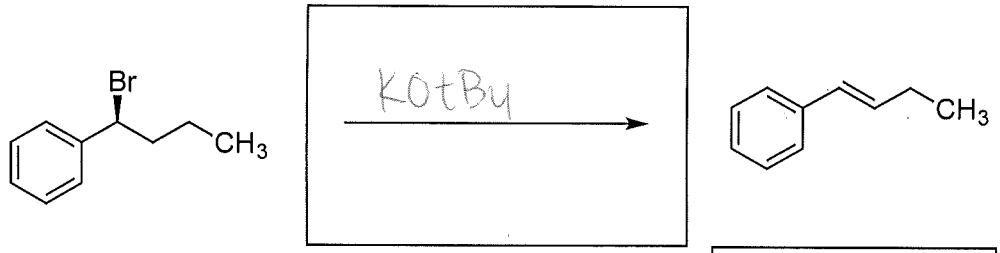


(racemic)



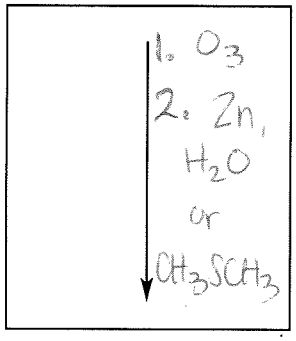
Is this reaction an oxidation, a reduction, or neither? neither

5. Fill in the missing reagents in the synthesis



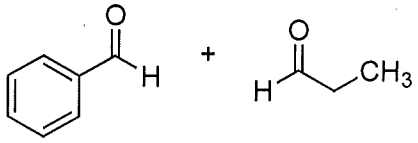
What is the name of this reaction?

elimination



What is the name of this reaction?

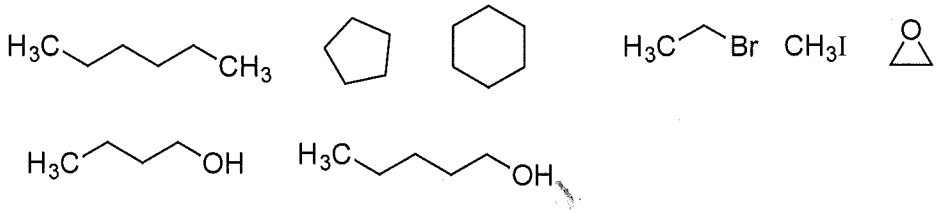
ozonolysis



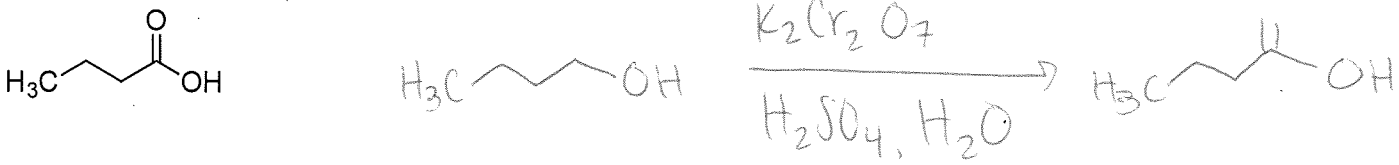
6. Propose syntheses of the targets below.
All carbons must come from the starting materials provided, you can use any reagent you wish.

HINT: COUNT YOUR CARBONS!!!

Starting Materials:



Target A.



Target B.