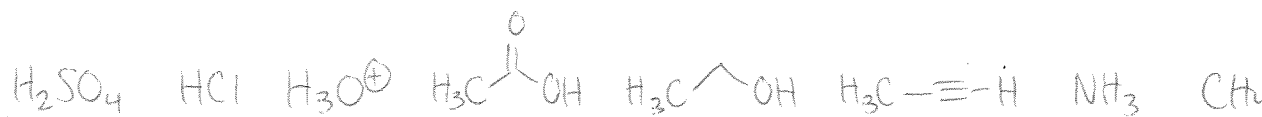
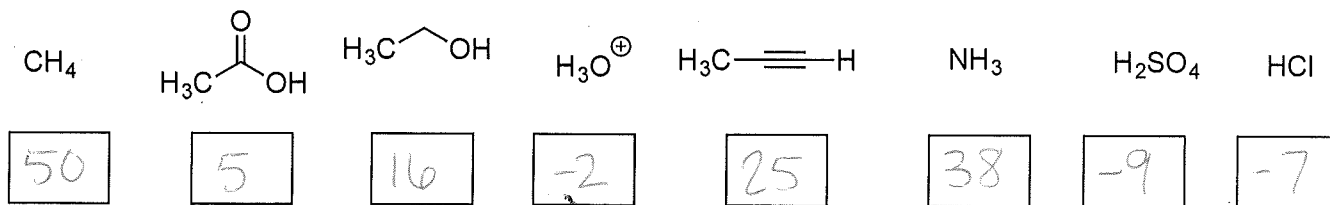


# Worksheet 0 -- Chem 51C -- Jarvo

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

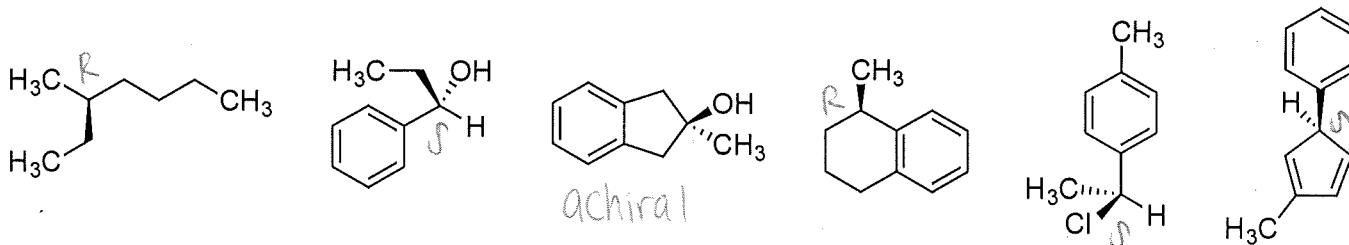
1. Provide pKa's for the following compounds. Arrange them on a number line according to their pK<sub>a</sub>



-10

50

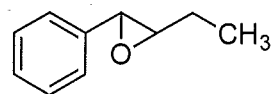
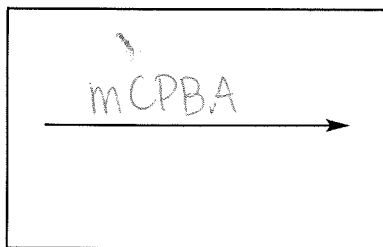
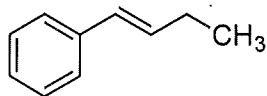
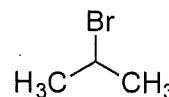
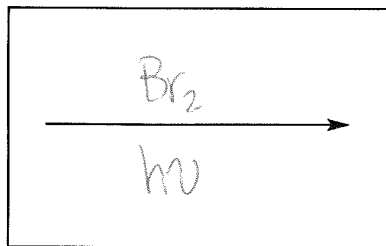
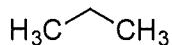
2. Assign the absolute configuration of the following compounds:



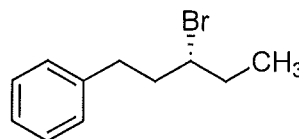
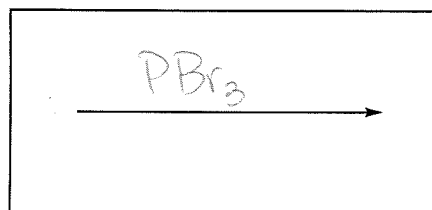
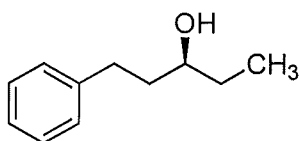
3. Fill in the periodic table with the missing elements

						18
						2 He Helium 4.00
5	13	14	15	16	17	10
B Boron 10.81	C	N Nitrogen 14.01	O Oxygen 16.00	F Fluorine 18.99		Ne Neon 20.18
13	14	15	16	17	18	
Al Aluminum 26.98	Si Silicon 28.09	P Phosphorus 30.97	S Sulfur 32.06	Cl Chlorine 35.45		Ar Argon 39.95
31	32	33	34	35	36	
Ga Gallium 69.73	Ge Germanium 72.61	As Arsenic 74.92	Se Selenium 78.96	Br Bromine 79.90		Kr Krypton 84.80
49	50	51	52	53	54	
In Indium 114.82	Sn Tin 118.71	Sb Antimony 121.76	Te Tellurium 127.60	I Iodine 126.90		Xe Xenon 131.29

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



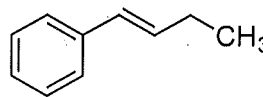
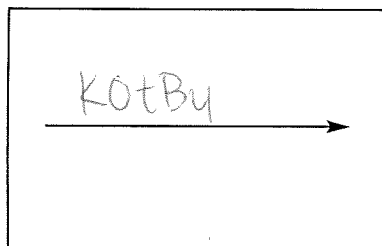
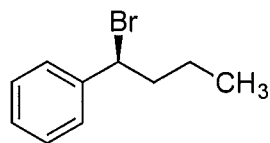
(racemic)



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

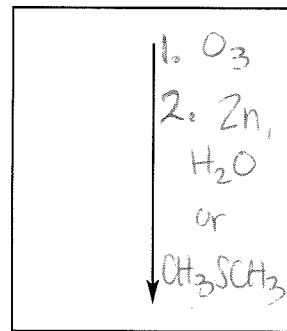
neither

5. Fill in the missing reagents in the synthesis



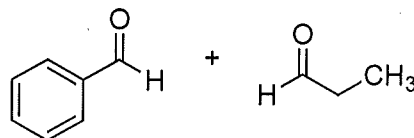
What is the name of this reaction?

elimination



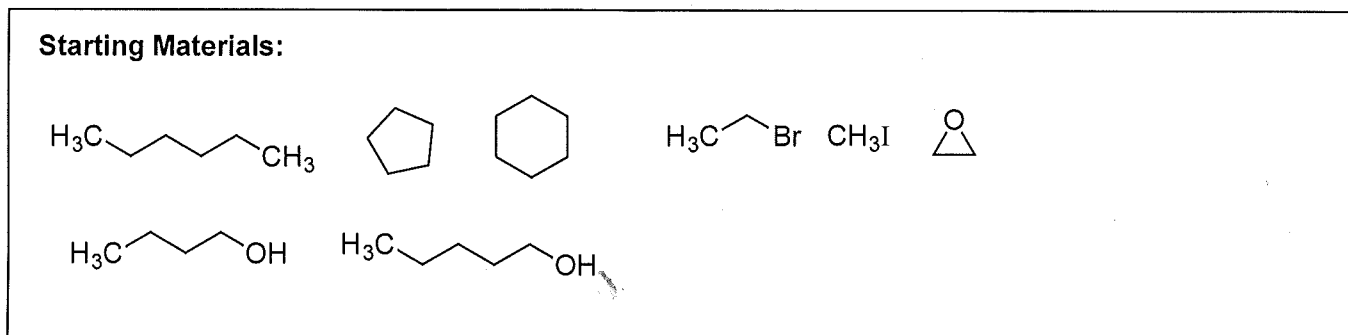
What is the name of this reaction?

ozonolysis

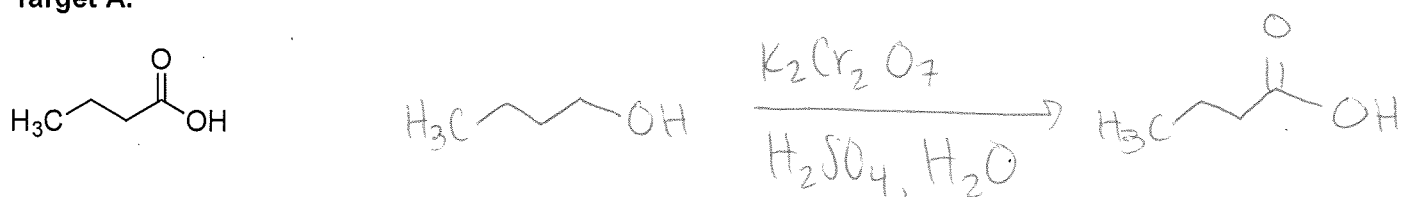


6. Propose syntheses of the targets below.  
All carbons must come from the starting materials provided, you can use any reagent you wish.

HINT: COUNT YOUR CARBONS!!!



Target A.



Target B.

