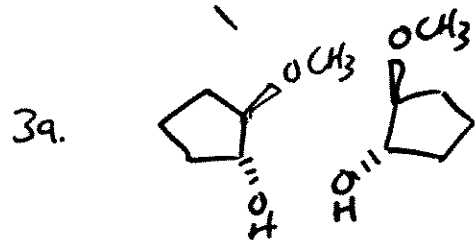
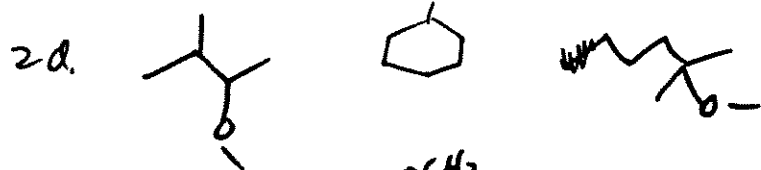
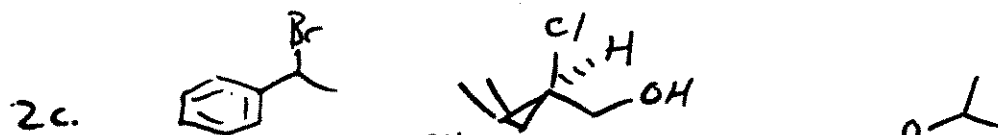
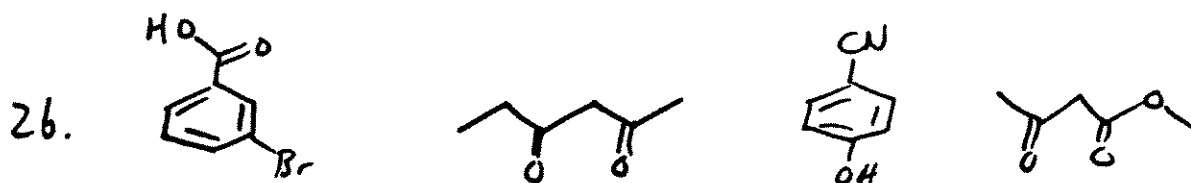
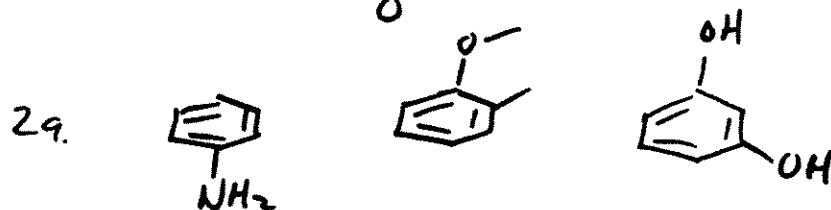
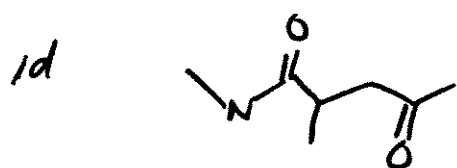
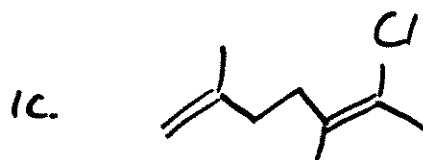
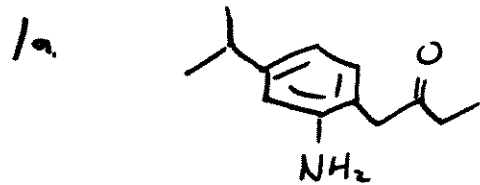
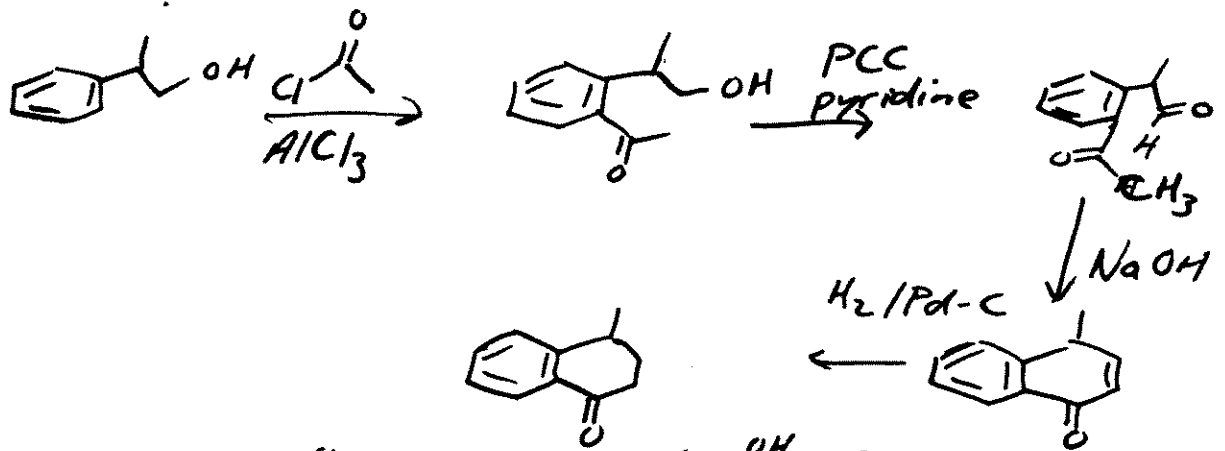


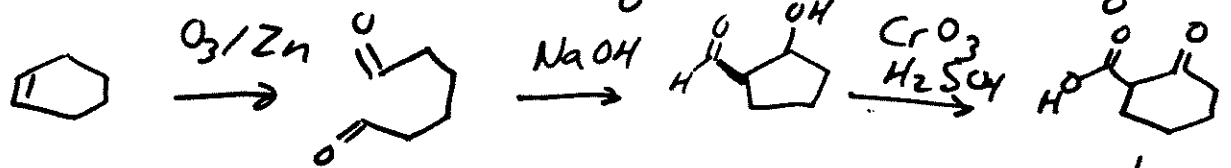
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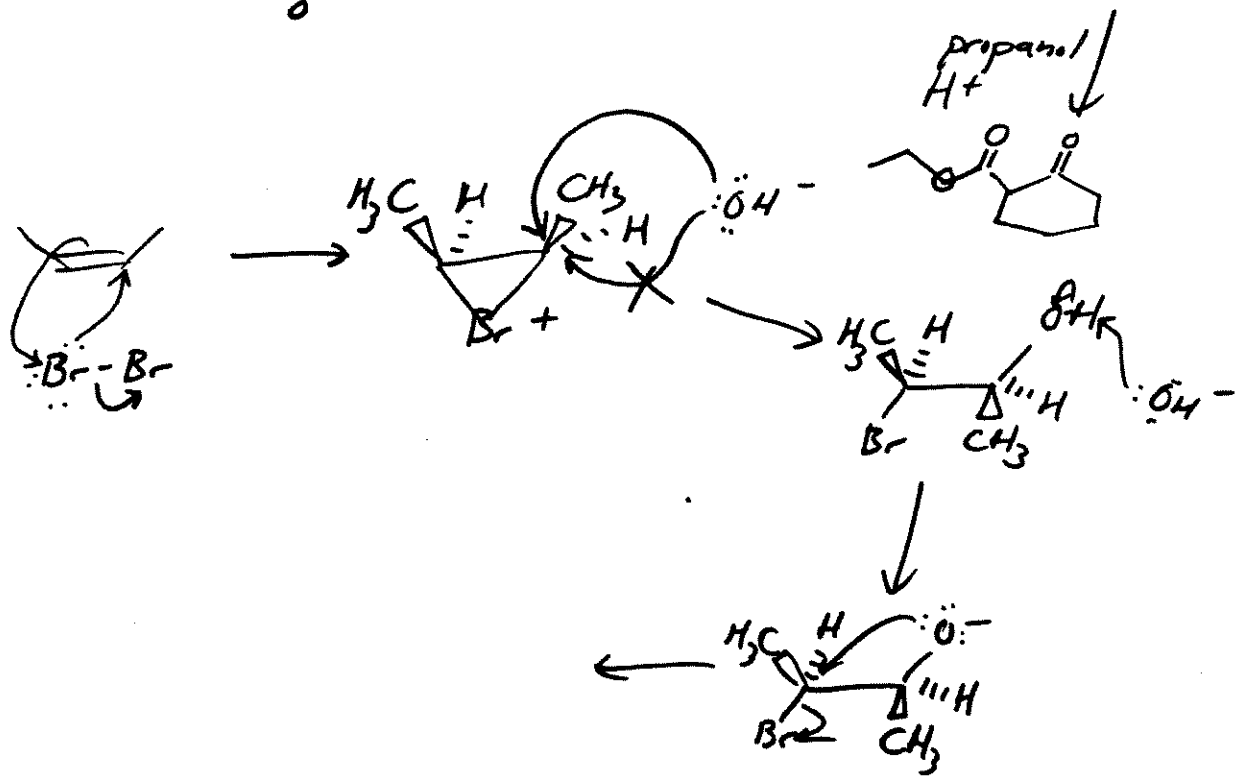
4b.

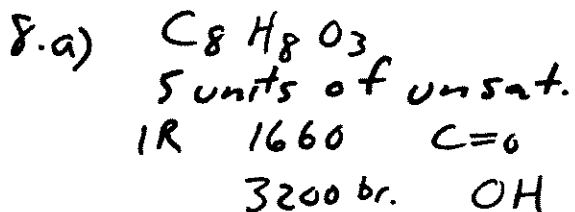
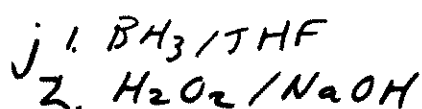
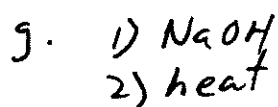
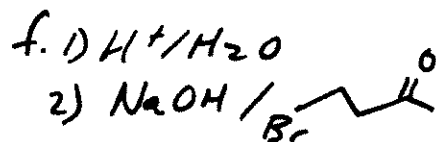
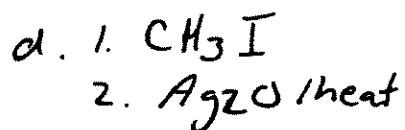
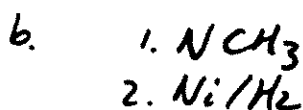
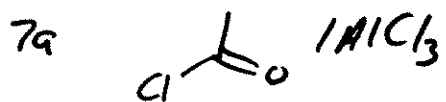


4c.

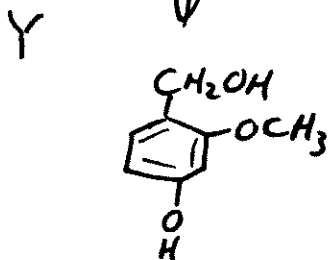
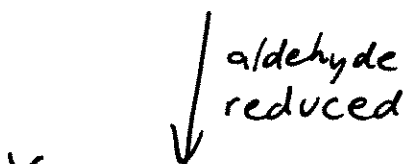
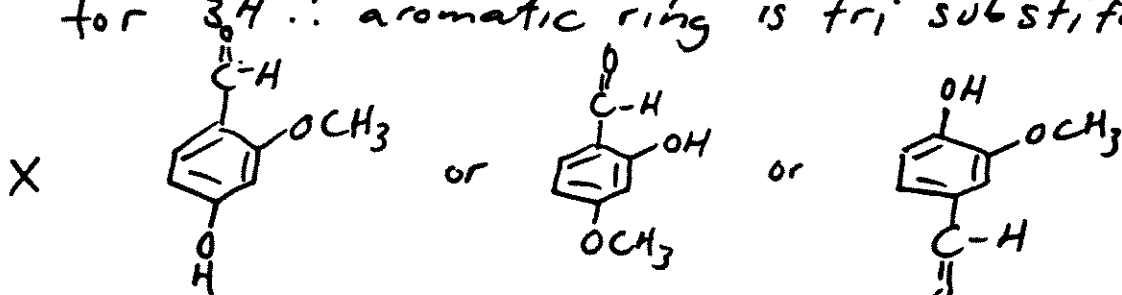


5a.

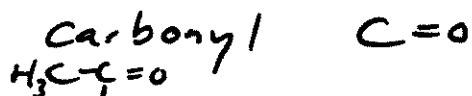




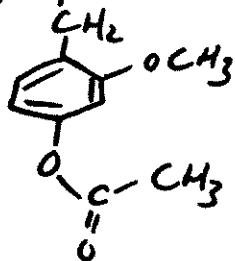
^1H NMR there are peaks between 6.5-8 ppm
 \therefore aromatic ring. These peaks integrate for 3H \therefore aromatic ring is tri substituted.



8c.



d.



e.

acetic acid / H_2SO_4 / Z

f.

Z would go to the ether layer sodium acetate goes to water with the H_2SO_4

g.

IR shows a C=O

Mass spectrometry tells you the molar mass of the product

Melting point tells you what temperature the compound melts

9.

dioxane NaBH_4 H_2SO_4 iodoform FeCl_3 

flammable

✓

x

x

x

x

✓

✓

corrosive

x

✓

✓

✓

x

x