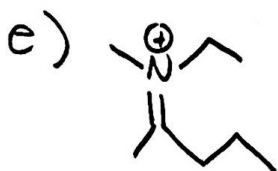
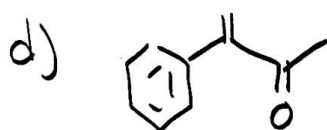
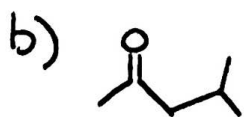
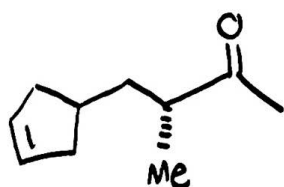


Organic chemistry Final Review

① For the following molecules show the result of nucleophilic attack, show all lone pairs in final product.

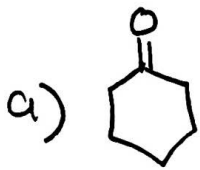


② Consider the following molecule



- Label the chiral center present
- is the chiral center R or S?
- would this molecule act as a nucleophile or an electrophile?

③ How many unique carbons are present in the following molecules



④ Draw Newman projections for the following indicated centers (C₂, C₃ bond axis)

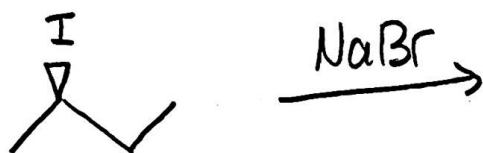
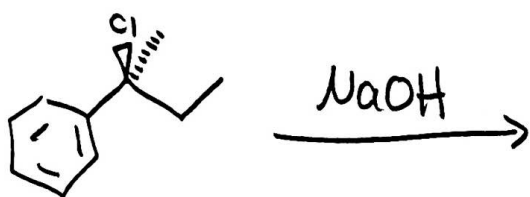


⑤ Consider the following information and propose a molecule consistent with the given data.

a) a molecule has 3 signals in a ¹³C NMR, this molecule also has a stretch apparent in an IR at 1715 cm⁻¹ what is the molecule?

6) For the following reactions label

- a) the nucleophile
- b) the electrophile
- c) if the rxn is S_N1 or S_N2
- d) show the arrows
- e) show the products created.



CHALLENGE QUESTIONS (nucleophiles are on the arrows)
just draw products and
indicate S_N1 or S_N2 or neither...?

