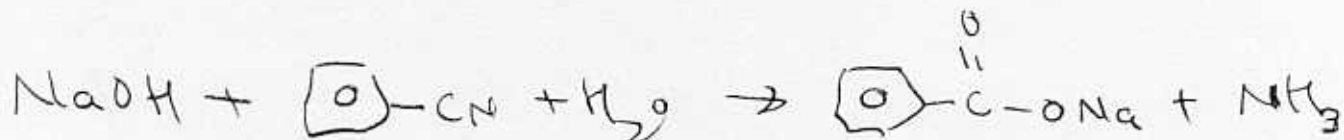
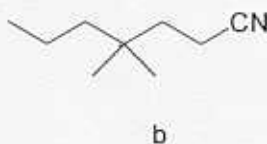
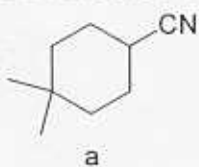


1. Show a balanced equation for the reaction of benzonitrile and aqueous sodium hydroxide to sodium benzoate! (6 pts)



2. Name the two nitriles below! (4 pts)



- a) 4,4-dimethylcyclohexanecarbonitrile
 b) 4,4-dimethylheptanenitrile

3. The compound CH_3CN is used as a solvent.

a. Provide the common name for this compound! (2 pts)

acetonitrile

b. Provide the IUPAC name for this compound! (2 pts)

ethanenitrile

4. During benzonitrile hydrolysis, you periodically checked for a basic compound by placing pH paper over your condensers. What compound did you check for? (1 pt)

NH_3 - ammonia