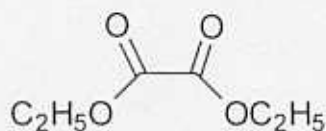
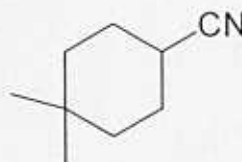


a



b



c

1. Circle the valid names for compounds a-c (select one name for each): 6 pts

a. 1-Cyclohexenoic acid    2-cyclohexenecarboxylic acid    1-cyclohexenecarboxylic acid  
 cis-1-cyclohexenoic acid

b. Propanoic anhydride    diethylmalonate    diethyloxalate    diethylcarbonate

c. 4-dimethylcyclohexanenitrile    4,4-dimethylcyclohexanonitrile    4,4-dimethylbenzonitrile  
4,4-dimethylcyclohexanecarbonitrile

2. Complete the following reactions by showing major organic products (4 pts)

