Chemistry 2500 (Fall 2017): Assignment #5 – Functional Groups

1. Draw 2 molecules that have the molecular formula C_4H_8O and are a/an:

   a) Ketone (only one)
   b) ether
   c) alcohol
   d) aldehyde

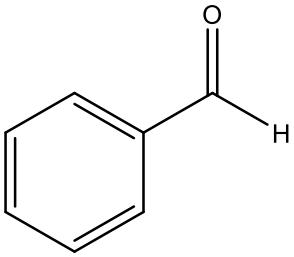
2. Draw a molecule that has the molecular formula $C_3H_7NO_2$ and is a/an:

   a) ester
   b) carboxylic acid
   c) amide

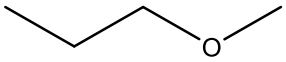
3. Match each named functional group (A – F) to the molecule (1 – 6) that contains it.

   A – Carboxylic Acid
   B – Ester
   C – Alcohol
   D – Amine
   E – Ether
   F – Aldehyde

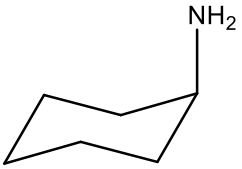
1 –



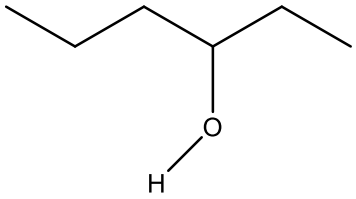
2 –



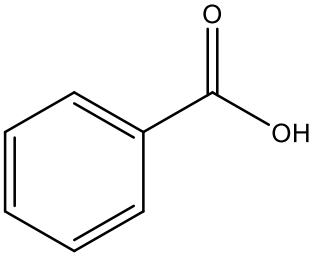
3 –



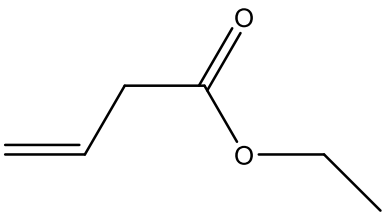
4 –



5 –



6 –



4. Draw 2 molecules that have the molecular formula C_3H_6O and are an: (10 points)

a) alcohol
b) ether
c) aldehyde (only one)