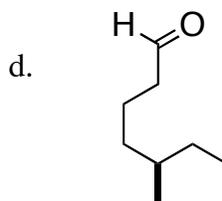
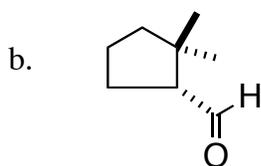
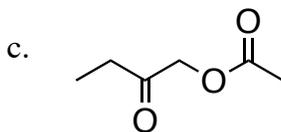
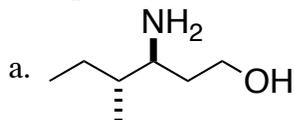


Fall 2008

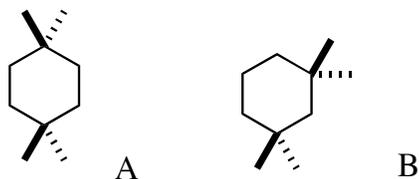
Homework #3

due: 10 a.m. Monday, September 22nd

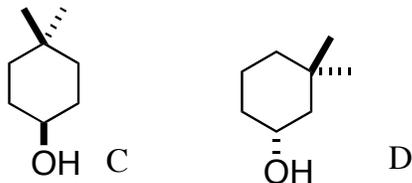
1. (12 points) Write out IUPAC names for each of the following:



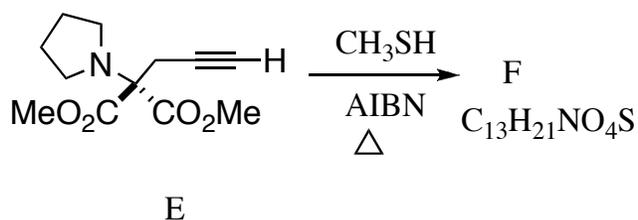
2. (12 points) a. Which is more stable, A or B? Why?



b. Which is more stable, C or D? Why?



3. (6 points) Reaction of **E** with CH_3SH gives **F**. Deduce the structure of **F**, and draw an arrow-pushing mechanism for the transformation of **E** to **F** (on back). Hint: the first step is H atom removal from the CH_3SH .

 ^{13}C NMR

171.8, s	44.0, d
171.4, s	43.0, t
75.4, s	37.4, t
71.9, d	31.9, t
52.6, q	28.6, t
52.3, q	18.5, q
48.6, t	