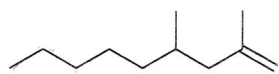
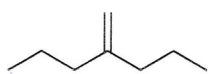


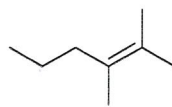
1. Name the following compounds. (6 pts)



2, 4-dimethyl-1-nonene

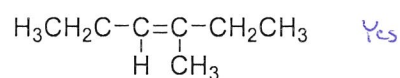


Z-propyl-1-pentene

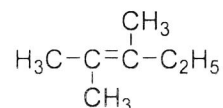
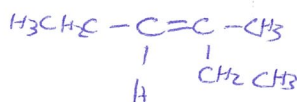


2, 3-dimethyl-2-hexene

2. Which of the following alkenes can exist as double-bond stereoisomers? Draw the structure of the double-bond stereoisomers. (6 pts)

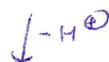


Yes

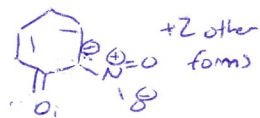
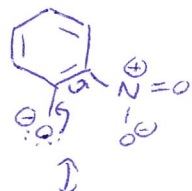
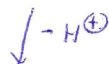


No

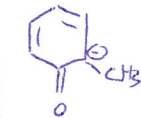
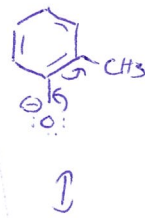
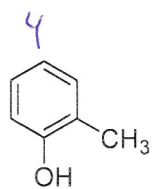
3. Rank the acidity of following compounds and explain. (8 pts) Hint: the nitro group has a positive charge on nitrogen.



+ 2 other res. forms.

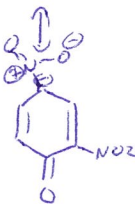
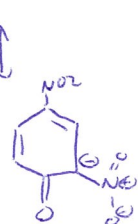
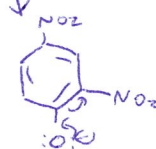
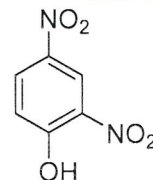


very stable - no  $\ominus$  on C.



Same as first compound, but  $\text{CH}_3$  group is sending in some  $e^-$  density by hyperconjugation  $\rightarrow$  less

Most acidic (1)



Both very stable - no  $\ominus$  on C.

