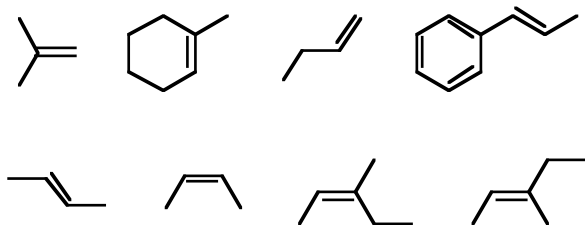


Problem Set 7

Chem 241/Spring 2007

Lots of fun problems with additions to alkenes (including stereochemistry)!

Show the mechanisms for each of the following alkenes as they react with each of the systems shown. Note that conditions b) do not exist -- they involve conditions not covered by McMurry and have been covered up in the answer key. Condition a) is from Chapter 6, the others are from Chapter 7.



The conditions:

- a) HBr
- b) ~~H₂O/H₂SO₄ (H₃O⁺)~~
- c) ~~Br₂~~
- d) 1) Hg(OAc)₂/H₂O 2) NaBH₄/H₂O
- e) 1) BH₃ 2) H₂O₂, aq base

There are 8 alkenes, each with 5 sets of conditions for a total of 40 reactions.