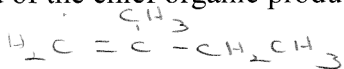
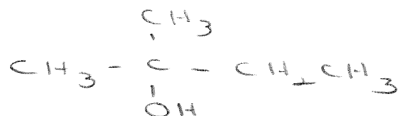


## Chapter 9 and 10: "Alkene: Reactions" and "Stereo-Specific/Selective" Worksheet

1. Give the structures and of the chief organic products expected from the reaction of 2-methyl-1-butene with:

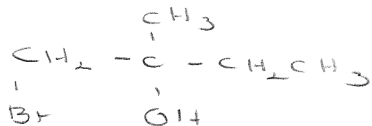


H<sub>2</sub>O, H<sup>+</sup>



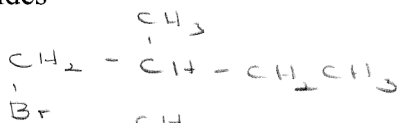
"Mark"

Br<sub>2</sub>(aq)



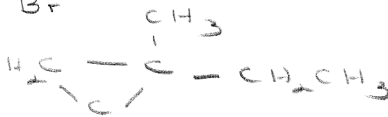
"Br" as electrophile

HBr, peroxides

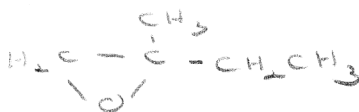


"Anti-Mark"

CH<sub>2</sub>N<sub>2</sub>, hv



PBA



2. Define *syn*- and *anti*- addition.

*Syn* ∅ Same Side

*Anti* ∅ Opposite Sides

3. Fill-in the table with *syn*- or *anti*- addition:

Addition of Halogens	"Anti" Addition
Hydroxylation with KMnO <sub>4</sub>	"Syn" Oxidation
Hydroxylation with HCO <sub>2</sub> OH	"Anti" Oxidation
Dehydrohalogenation of Alkyl Halides (E2)	"Anti" Elimination