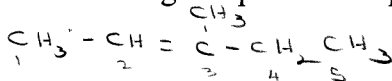
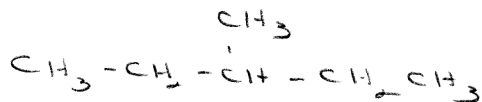


## Additional Chapter 8: "Alkenes: Reactions" Worksheet

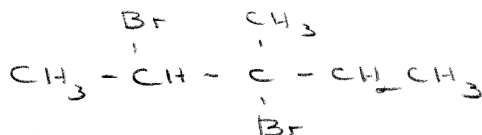
Give the structures and of the chief organic products expected from the reaction of 3-methyl-2-pentene with:



H<sub>2</sub>, Pt

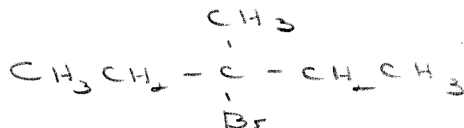


Br<sub>2</sub>/CCl<sub>4</sub>



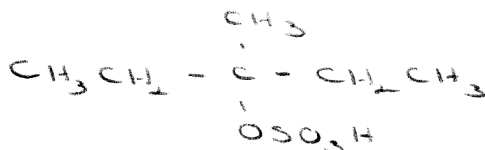
"Anti"

HBr



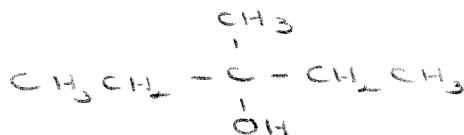
"Mark"

H<sub>2</sub>SO<sub>4</sub>



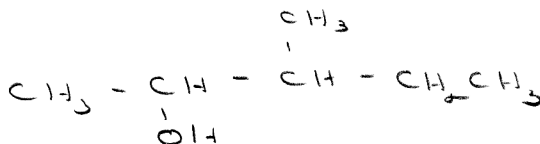
"Mark"

H<sub>2</sub>O, Hg(OAc)<sub>2</sub>; then NaBH<sub>4</sub>



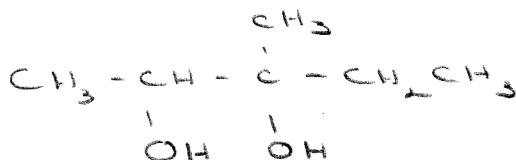
"Mark"

(BH<sub>3</sub>)<sub>2</sub>; then H<sub>2</sub>O<sub>2</sub>, OH<sup>-</sup>

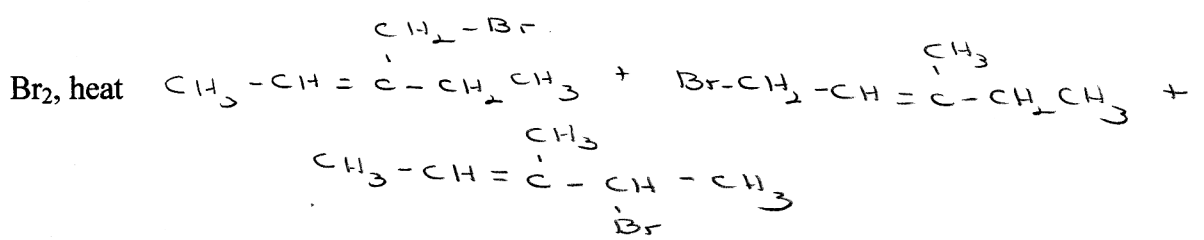


"Anti - Mark"

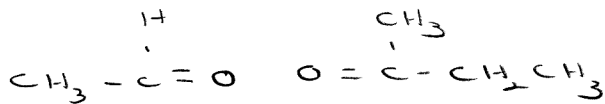
KMnO<sub>4</sub>



"Syn"



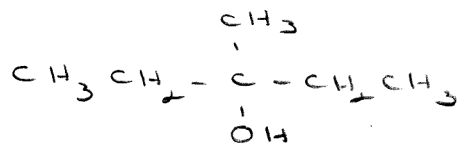
O<sub>3</sub>; then Zn/H<sub>2</sub>O



KMnO<sub>4</sub>, heat

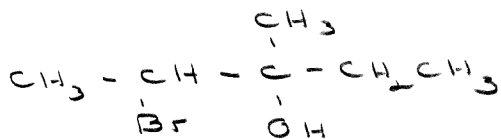


H<sub>2</sub>O, H<sup>+</sup>



"Mark"

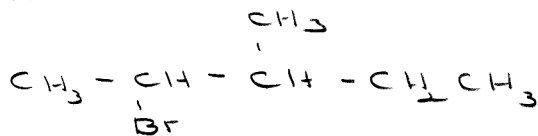
Br<sub>2</sub>(aq)



"Br" as electrophile

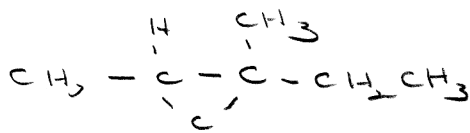
"Mark"

HBr, peroxides

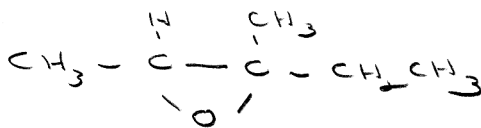


"Anti-Mark"

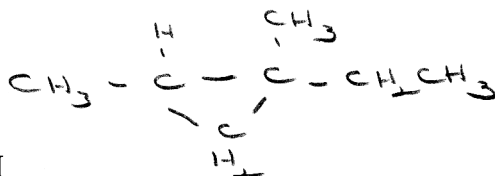
CH<sub>2</sub>N<sub>2</sub>, hv



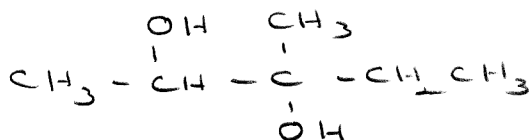
PBA



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



HCO<sub>3</sub>H



"Anti:"