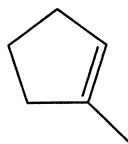


## Additional Chapter 13: "Alicyclics" Worksheet

Give the structure of the chief organic product(s) expected from the reaction of methylcyclopentene.



H<sub>2</sub>/Pt

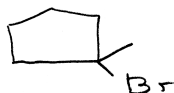


Br<sub>2</sub>/CCl<sub>4</sub>



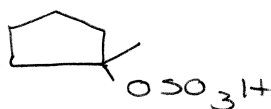
"Anti"

HBr



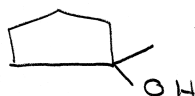
"Mark"

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



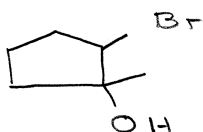
"Mark"

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



"Mark"

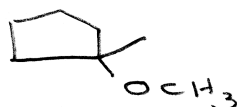
Br<sub>2</sub>(aqu)



"Br" as electrophile

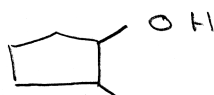
CH<sub>3</sub>OH, Hg(OAc)<sub>2</sub>; Then NaBH<sub>4</sub>

instead  
of H<sub>2</sub>O



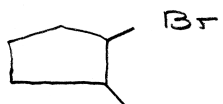
"Mark"

(BH<sub>3</sub>)<sub>2</sub>; Then H<sub>2</sub>O<sub>2</sub>, NaOH



"Anti-Mark"

HBr, Peroxides



"Anti-Mark"

$\text{CH}_2\text{CO}, h\nu$



$\text{H}_2\text{O}, \text{Hg}(\text{OAc})_2$ ; Then  $\text{NaBH}_4$



"Mark"

$\text{CH}_2\text{N}_2, h\nu$

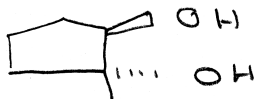


$\text{KMnO}_4$



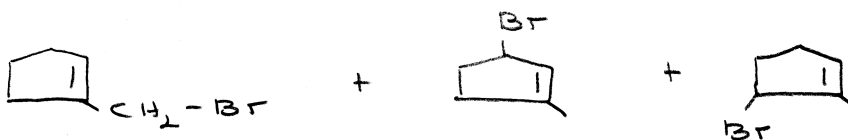
"Syn"

$\text{HCO}_3\text{H}$



"Anti"

$\text{Br}_2/\Delta$

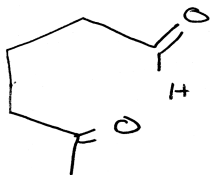


"Allylic"

PBA



$\text{O}_3$ ; Then  $\text{H}_2\text{O}, \text{Zn}$



$\text{KMnO}_4, \Delta$

