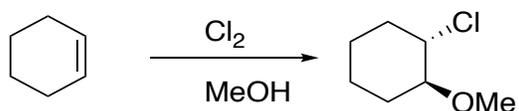
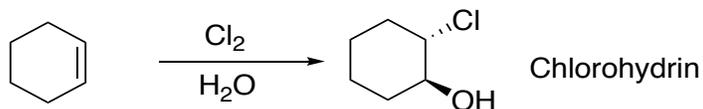
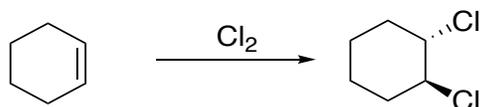
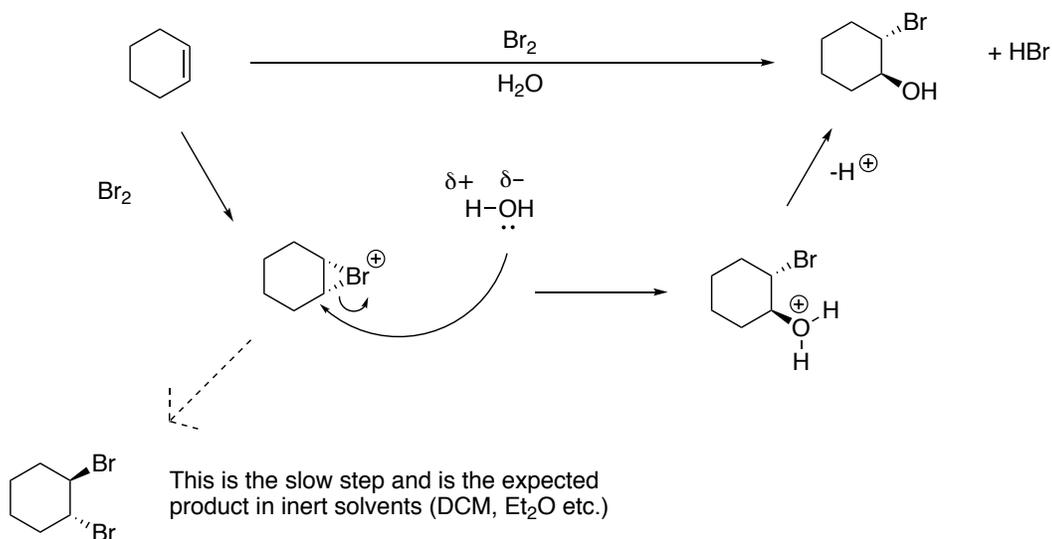


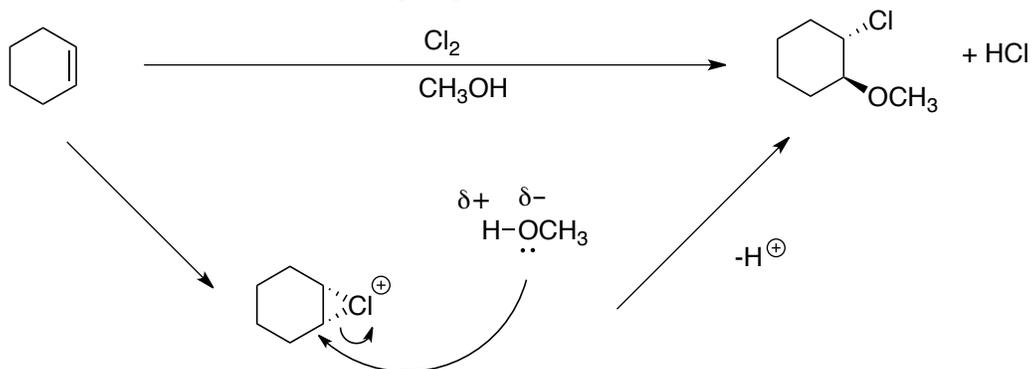
## Ex #4) Cyclohexene



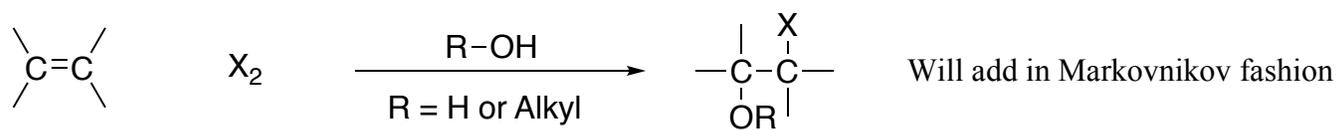
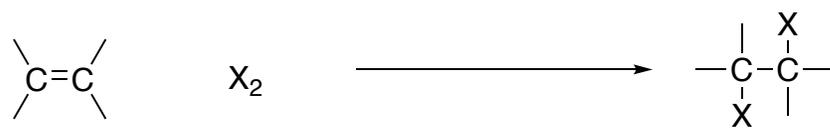
## Mechanisms:

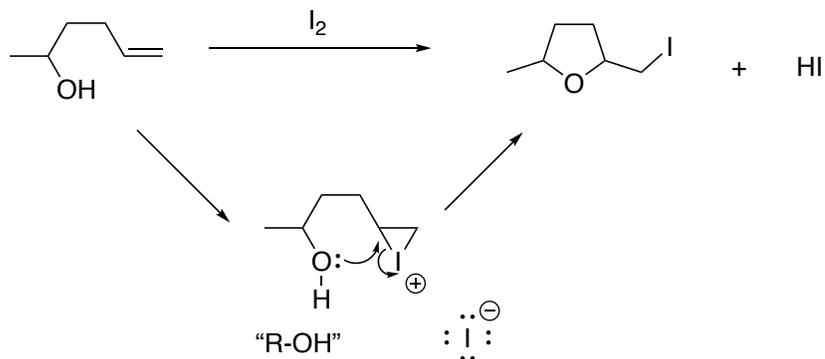
#1) Addition of an alcohol functional group (in H<sub>2</sub>O)

#2) Addition of an ether functional group (in CH<sub>3</sub>OH)



**Summary:**



**Ex #6)**

In the above example, the intramolecular reaction (meaning within the same molecule) occurs much much FASTER than the intermolecular reaction (between two or more molecules). This means that the  $-OH$  group will attack the iodonium ion much faster than the  $I^-$  group because it is an intramolecular reaction.

Intramolecular reaction almost always beats intermolecular reactions.

**Ex #7)**