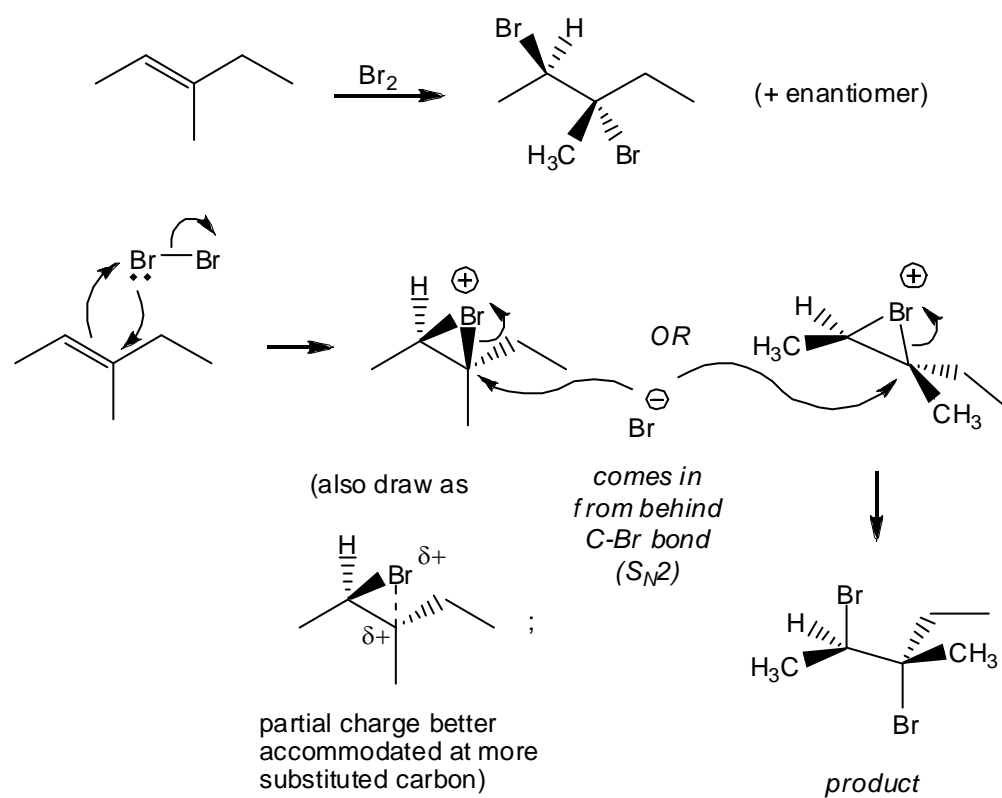
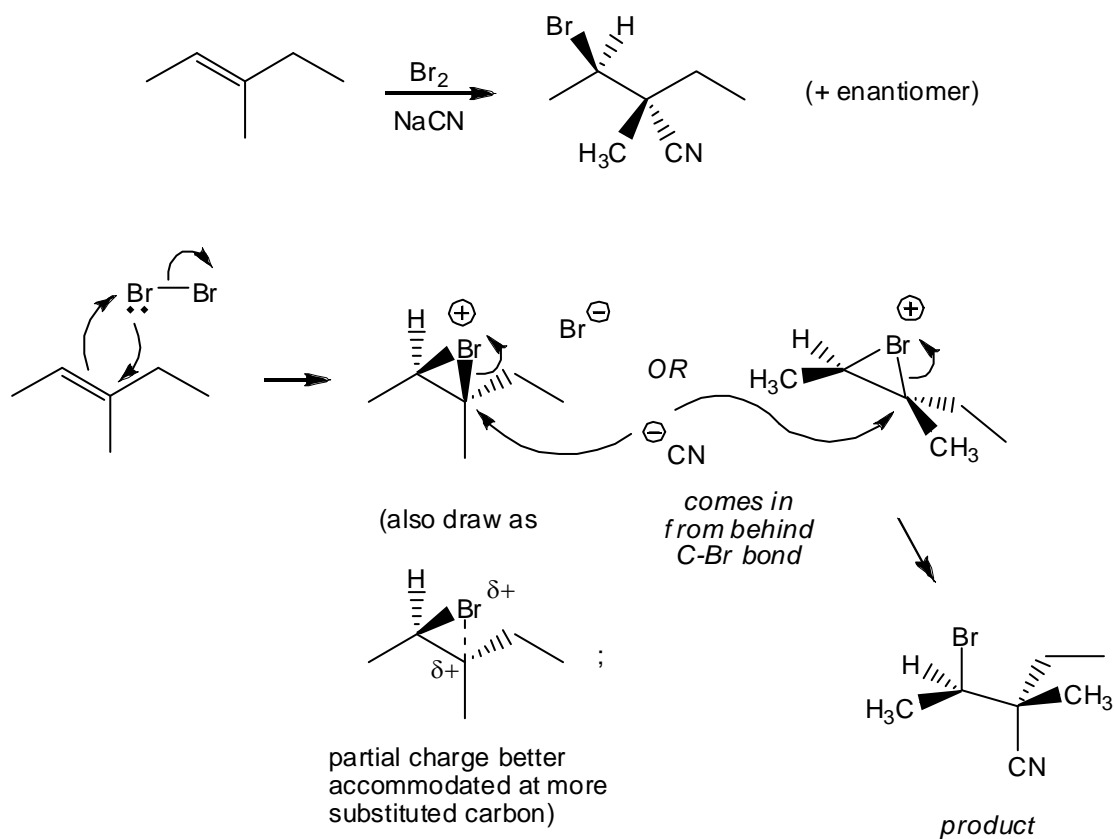


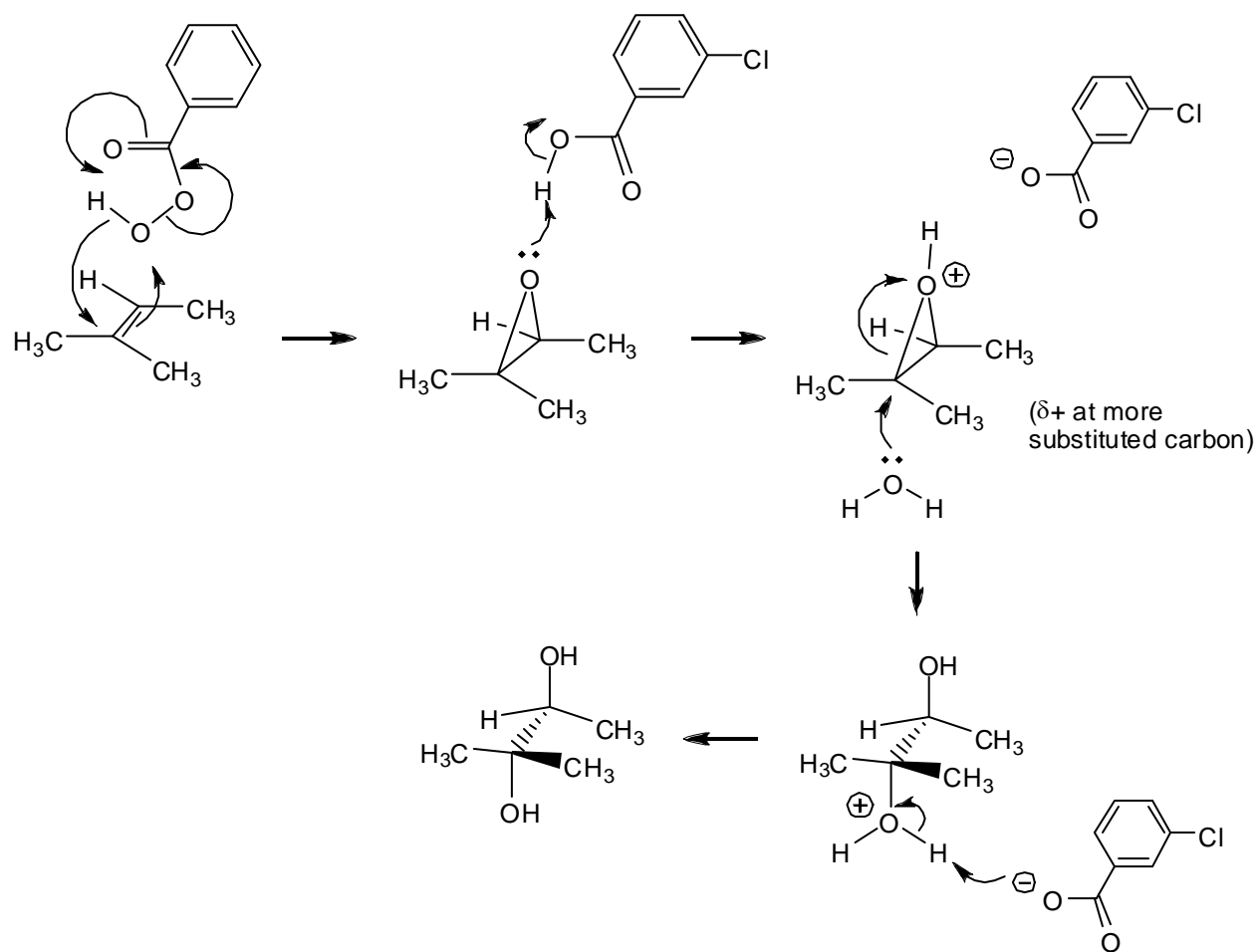
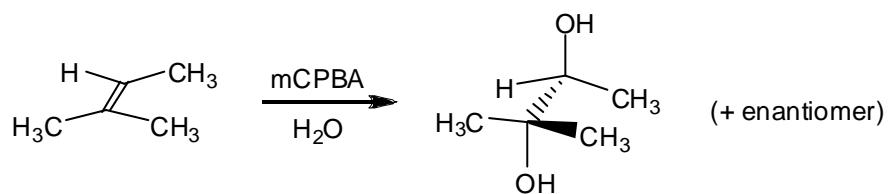
Workshop 19 Solutions
Diverted Alkene Addition Mechanisms



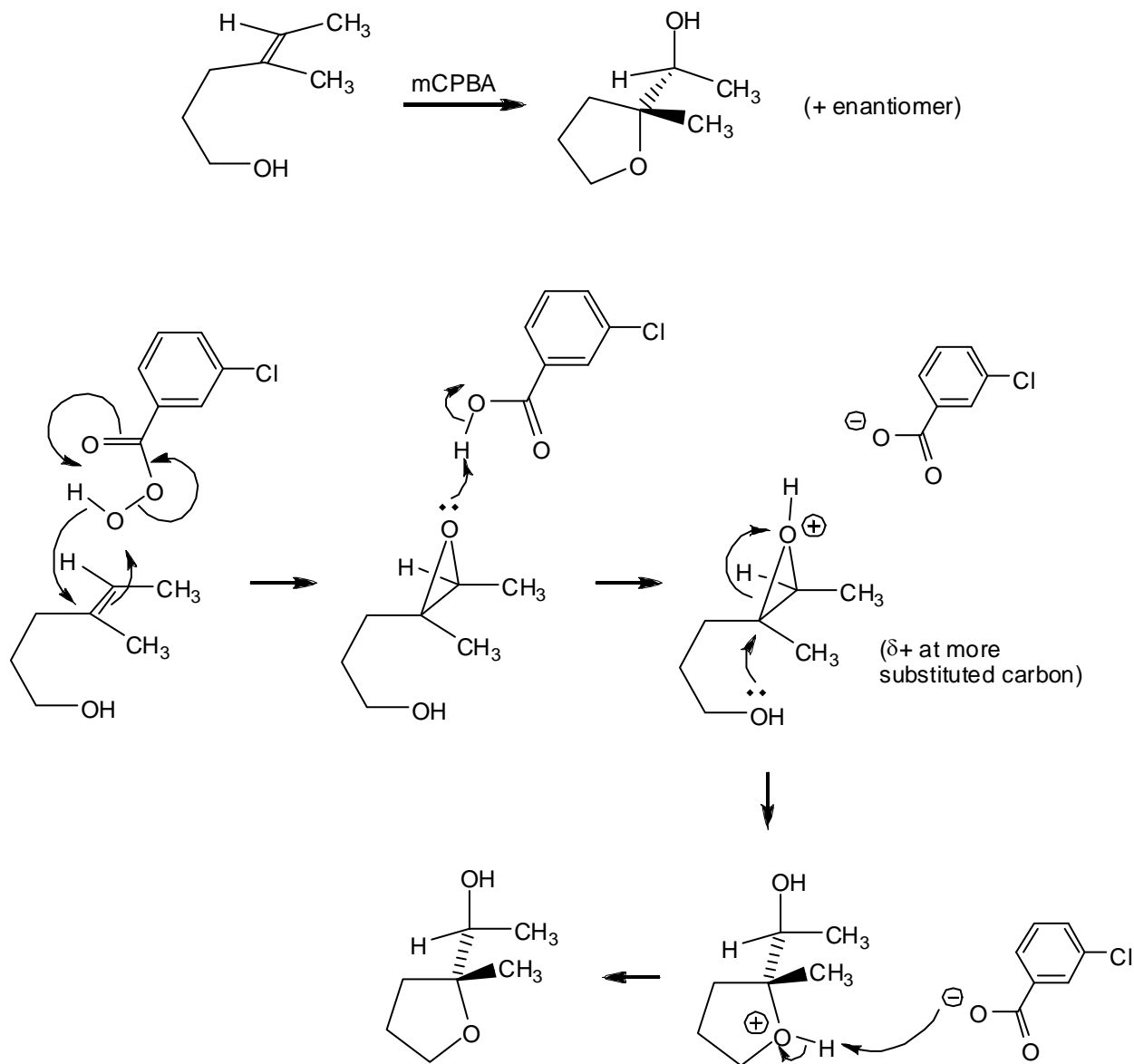
The other enantiomer would come from the initial bromonium ion forming from the bottom of the alkene instead of the top.



Again, the other enantiomer would come from the initial bromonium ion forming from the bottom of the alkene instead of the top, as I've shown it above.

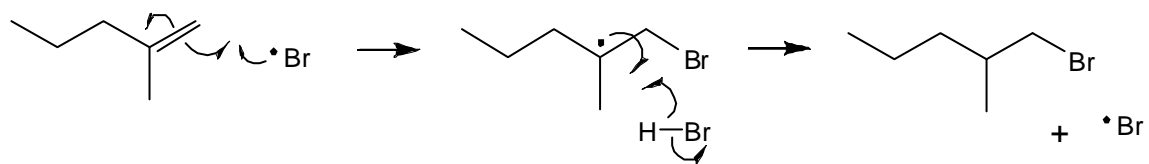
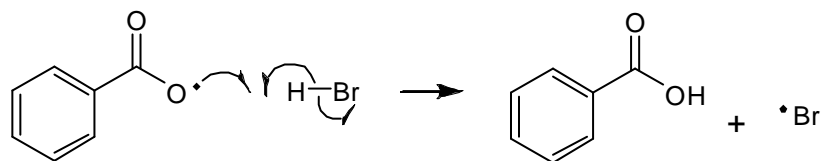
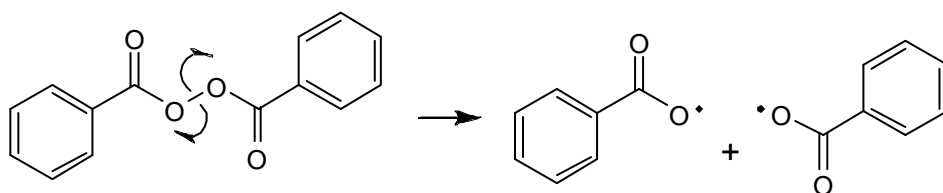
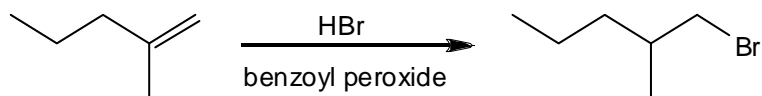


The other enantiomer would come from the epoxide forming on the bottom of the alkene instead of the top, and the -OH then attacking from the top.

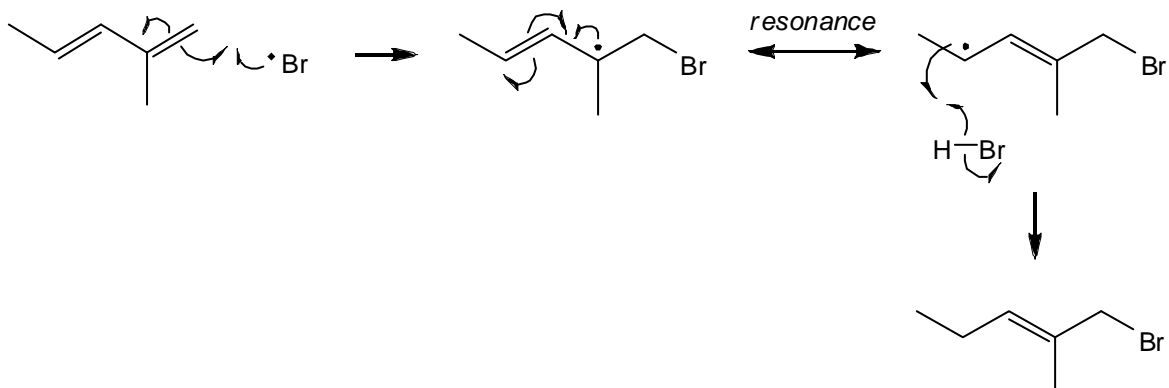
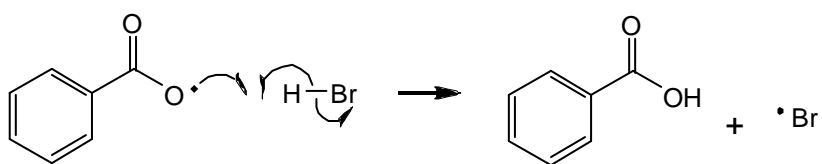
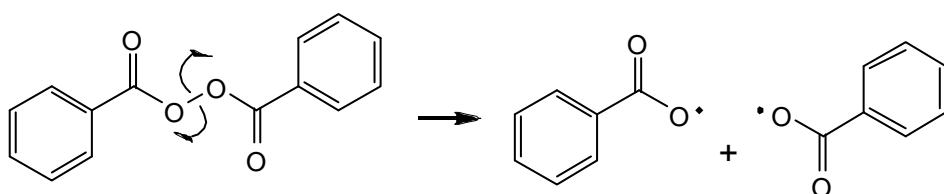
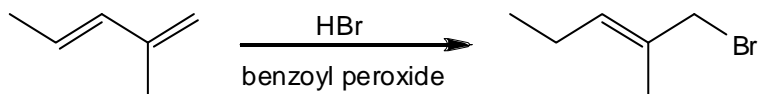


The epoxide oxygen must be protonated first in this mechanism, because the oxygen attacks at the more substituted carbon. You could draw a mechanism in which protonation happened later, but then the oxygen would attack the less hindered carbon (which is not the case).

The other enantiomer would come from the epoxide forming on the bottom of the alkene instead of the top, and the -OH then attacking from the top.



Addition is anti-Markovnikov, with Br added to less substituted carbon.



Here, the final radical reacts to generate the most substituted alkene as the most stable product.
