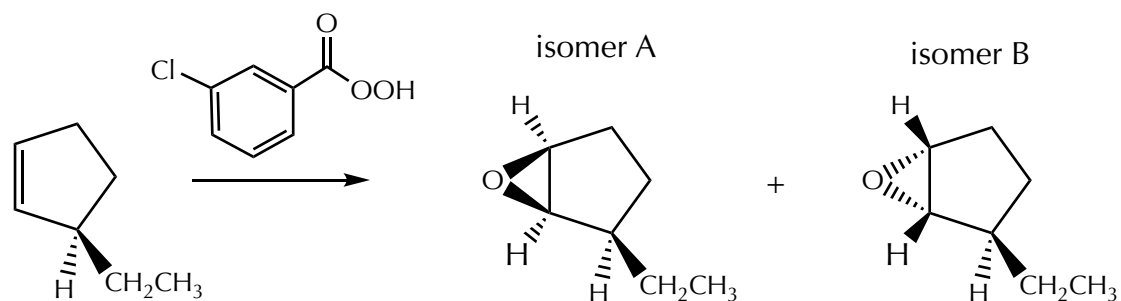


## Problem of the Day 34

Section 9.2

Question 9.06 (b)

The oxidation reaction with mCPBA is irreversible. Which of the two stereoisomeric products is the major product and why?



If you imagine the ring as roughly planar, then the mCPBA needs to pass closely to the ethyl group during the collision to make isomer A, while it comes from the side opposite the ethyl group to make isomer B — the second pathway is less sterically congested during the collision, has a lower  $E_A$ , and is faster

