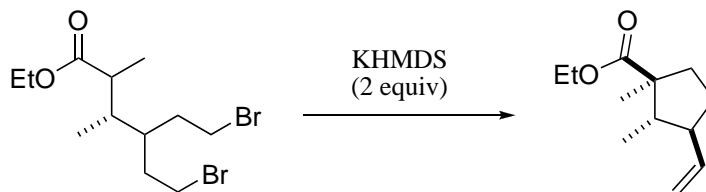


Q1.

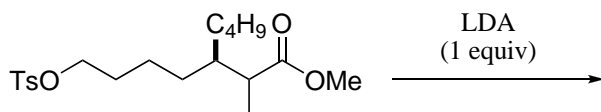
Provide a mechanism that accounts for the product and relative configurations of the following reaction:



Q2. How many moles are there in a mole of moles?

Q3.

Provide the structure of the major product and a mechanism that accounts for the relative configurations of the following reaction:



Q4. What are the three basic physical organic chemistry equations?

Q5. Derive the integrated first-order rate law.