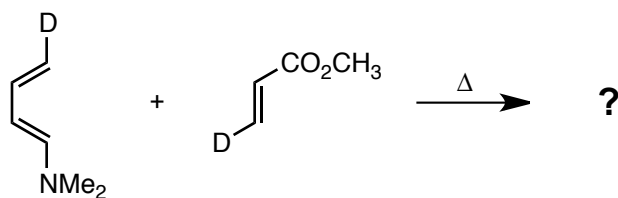


Challenge question #2

Predict the product for the following reaction.

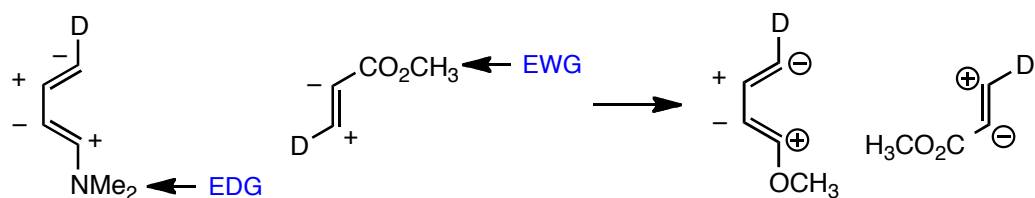


- (a)
- (b)
- (c)
- (d)

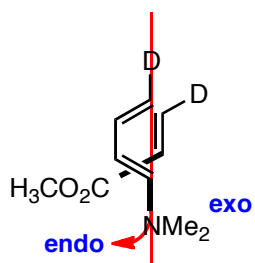
Answer

In this Diels-Alder reaction, both diene and dienophile are *unsymmetrical*; so we need to follow the following steps:

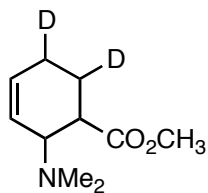
1. Assign diene + dienophile polarities and align them



2. Draw the *endo* transition state



3. Form the 6-membered ring



4. Draw relative stereochemistry (*endo* vs. *exo*)

