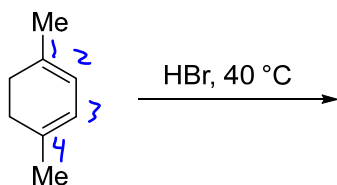


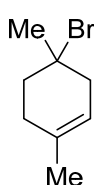
Name: \_\_\_\_\_

1. Circle the major product for the following reactions. (2 points)

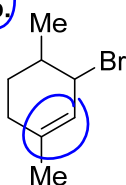
i.



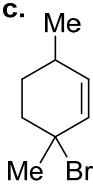
a.



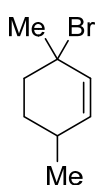
b.



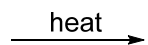
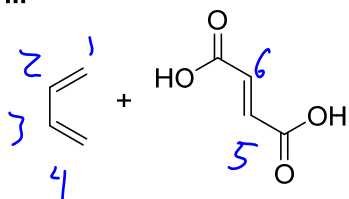
c.



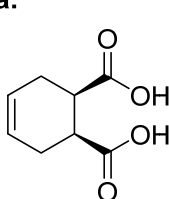
d.



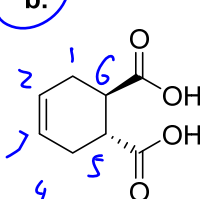
ii.



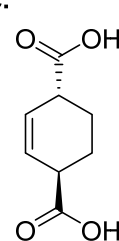
a.



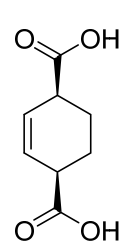
b.



c.



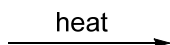
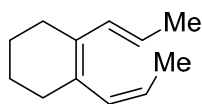
d.



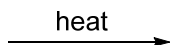
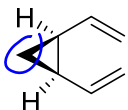
2. Provide the major product(s) for the following reactions. (3 points)

*6π, thermal, disrotatory*

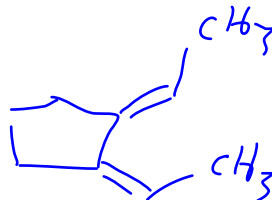
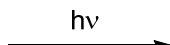
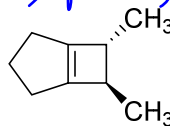
a.

*Cope*

b.



c.

*4π, photo, disrotatory*

3. a. Predict the major product for the following reaction.

- b. Provide a mechanism including a transition state arrangement to support your prediction. (5 points)

