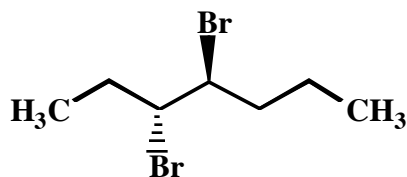


Week 13 Group Questions

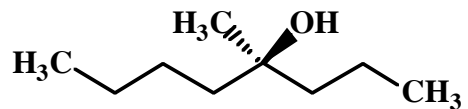
1. Design a synthesis of the following racemic 1,2-dibromide from acetylene, organic compounds that contain three or fewer carbons, and any additional inorganic reagents that are necessary. Show all reagents and stable synthetic intermediate compounds. Use a star to mark each step that creates a chiral product. Explain clearly why each starred step affords a racemic mixture.



2. Solve problem 12-7 on pages 543–544 of Wade, *Organic Chemistry*, 6th edition.
3. Solve problem 12-20 on pages 554–555 of Wade, *Organic Chemistry*, 6th edition.

4. Answer the following questions precisely, succinctly and with correct grammar.

A. Why is it impossible to oxidize the following alcohol with PCC?



B. Why will the following proposed reaction fail to give the desired ether?

