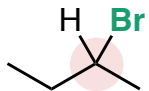


Drawing Chiral Molecules and Defining Isomeric Relationships

1. Draw the (*R*) and (*S*) enantiomers of each molecule below, each containing only one chiral center (highlighted for you)

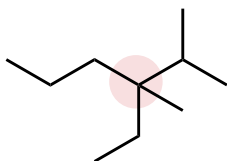
A.



(*R*)-isomer

(*S*)-isomer

B.

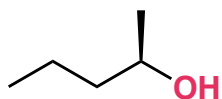


(*R*)-isomer

(*S*)-isomer

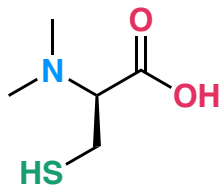
2. Draw the enantiomer of each chiral molecule below.

A.



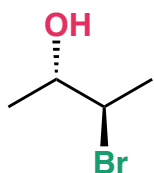
enantiomer

B.



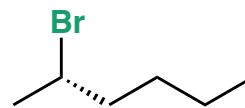
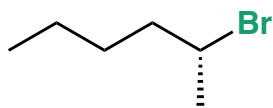
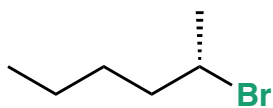
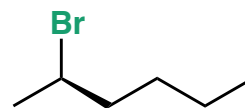
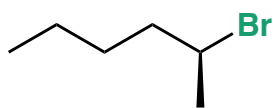
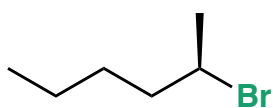
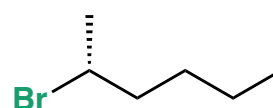
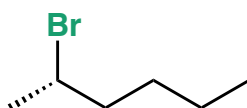
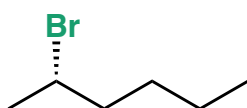
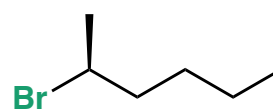
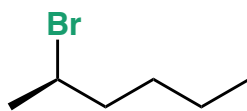
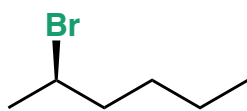
enantiomer

C.

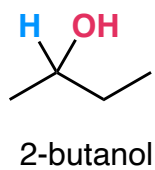


enantiomer

3. **Select all** of the molecules below that are (*R*)-2-bromohexane.



4. Draw **three different orientations** of (*S*)-2-butanol



--	--	--

5. Use the flowchart to determine the relationship between the pairs of molecules below.

