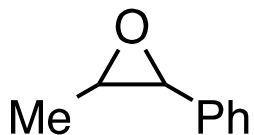


How many stereoisomers?



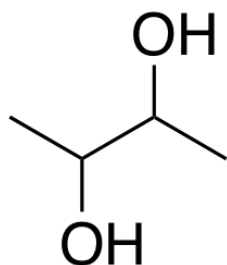
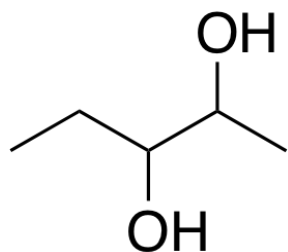
Follow-up:

- Draw all stereoisomers.
- Assign R/S.
- Label relationships between all stereoisomers.

- A. 2
- B. 3
- C. 4
- D. 5
- E. Achiral

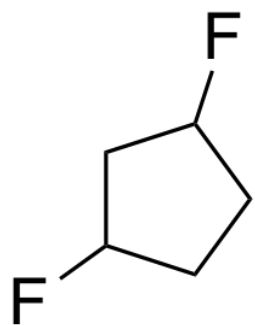
Draw All Stereoisomers

Make models too!



Draw All Stereoisomers

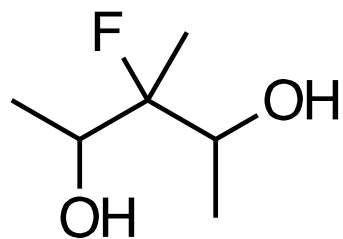
(Make models too!)



How do you find meso compounds?

Based on the previous examples, how can you recognize meso compounds? Describe your method as if you are teaching it to another student! Use examples.

Draw all stereoisomers and label all relationships.



Optical Rotation & % ee

Question

- Pure (S)-2-butanol has a specific rotation of +13.52 degrees. A sample of 2-butanol prepared in the lab and purified by distillation has a calculated specific rotation of +6.76 degrees. What can you conclude about the composition?

- A. 50% (S), 50% impurity
- B. 50% (S), 50% (R)
- C. 50% (S), 50% racemic
- D. some other mixture
- E. Cannot tell from this info

Challenge!

- Are the following molecules chiral?

