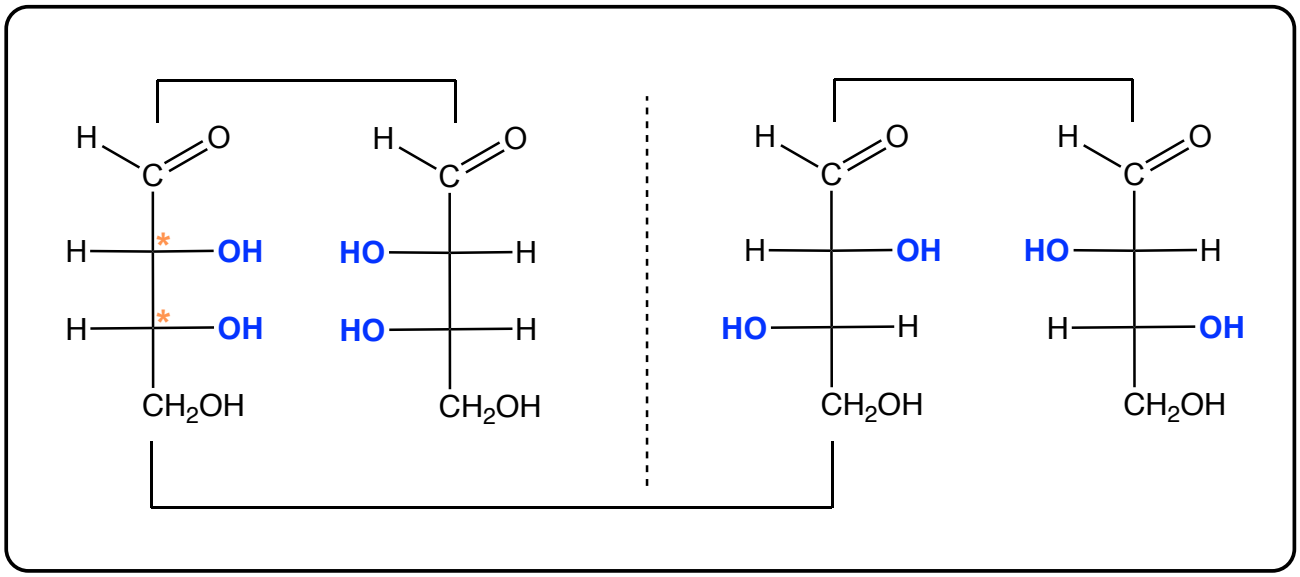
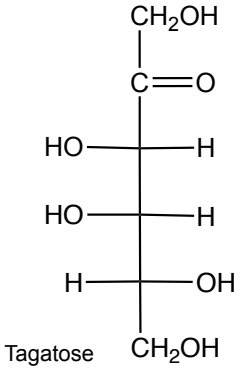
CONCEPT: ENANTIOMERS VS DIASTEREOMERS

- **Recall:** Stereoisomers have same molecular formula and connectivity but different _____ orientation.
  - □ **Enantiomers:** chiral molecules with nonsuperimposable _____ image of each other.
  - □ **Diastereomers**: _____ that are _____ mirror images of each other.



- Number of stereoisomers: _____, where n = ____ of **chiral centers**. 2— = _____ stereoisomers.

EXAMPLE: Circle all chiral centers in the following monosaccharide and state the number of possible stereoisomers.

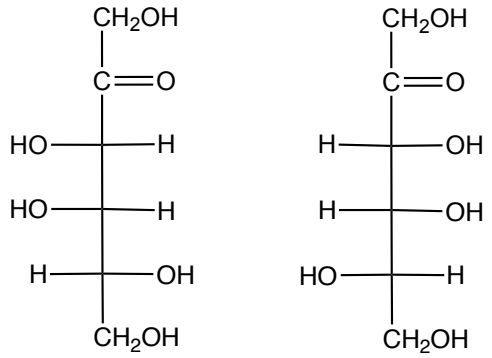


Tagatose

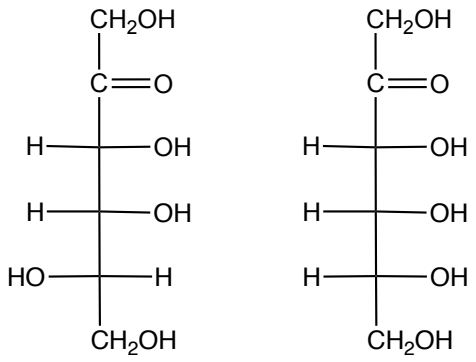
CONCEPT: ENANTIOMERS VS DIASTEREOMERS

PRACTICE: Identify each pair of carbohydrates as enantiomers or diastereomers.

i)



ii)



PRACTICE: Draw the enantiomer of given structure of Xylose, and identify as D or L.