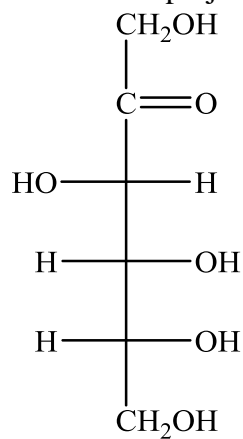


### Practice 10-1

The Fischer projection of fructose is given below:



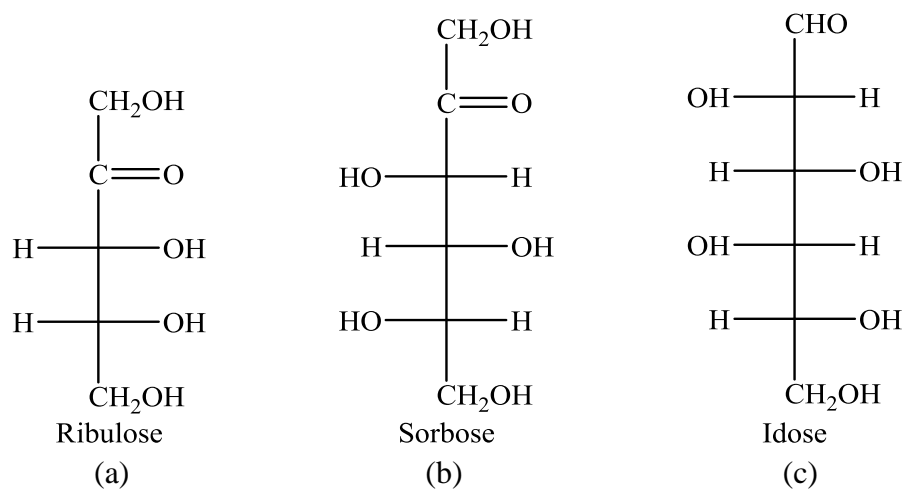
- Write the molecular formula for fructose.
- Classify based on functional group.
- Classify based on the number of carbons.
- Classify based on functional group and the number of carbons.

### Answer

- There are six carbon atoms, twelve hydrogen atoms and six oxygen atoms. The molecular formula is  $\text{C}_6\text{H}_{12}\text{O}_6$ .**
- The functional group is a ketone, therefore fructose is a ketose.**
- There are six carbon atoms, therefore fructose is a hexose.**
- Combining b and c, fructose is a ketohexose.**

**Practice 10-2**

State whether each of the following is the D or L isomer.



**Answer**

**a) D-Ribulose**

**b) L-Sorbose**

**c) D-Idose**