5A. ( 9 pts ) Identify the appropriate configuration (e.g., $R, S, E, Z$ ) for each of the following compounds. Show your work to receive credit - you must show the priority of each group, etc.




5B. (4 pts) Complete the Fischer projection for compound $\mathbf{A}$.


A


A

5C. (3 pts) Determine whether the following compound is chiral (yes/no) and whether or not it is optically active (yes/no).


5D. (8 pts) Answer the following questions, using the given Fischer projection of compound $\mathbf{X}$.
What is the configuration of compound $\mathbf{X}$ ? $(R$ or $S)$ $\qquad$
Is compound $\mathbf{X}$ chiral? (yes or no) $\qquad$
Does compound $\mathbf{X}$ have an enantiomer? (yes or no) $\qquad$
What do you expect for the optical rotation $[\alpha]$ for compound $\mathbf{X}$ ? $\qquad$
a) dextrorotatory; b) levorotatory; c) neither; d) can't tell


