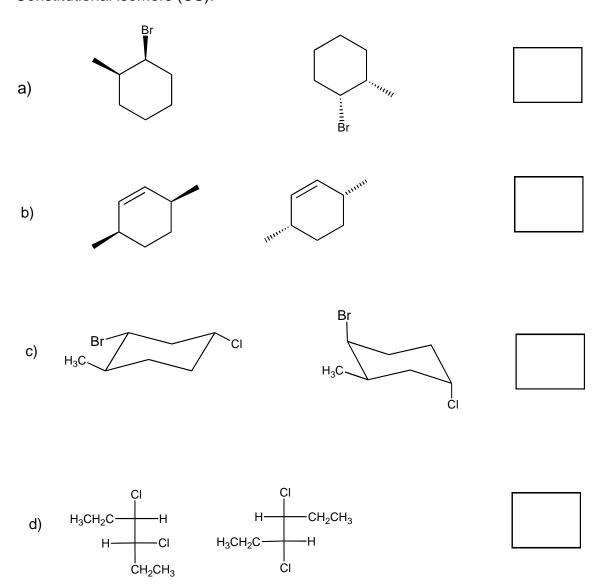
1. (8 Points, 2 points each) Indicate the relationship of the following pairs as Enantiomers (E), Diastereomers (D), Identical (I), Conformational (C), or Constitutional isomers (CS).



2. 4 Points, 1 pts. each) Which of the following molecules are optically active?

3. Name the following compounds (3 points each, 6 total)

A NO_2

B CH₃

4. Draw the products for the following reactions (3 points each, 6 total).

A. O CI CH_3 $AICI_3$ (catalyst)

B. Cl₂
FeCl₃ (catalyst)

5. True or false enantiomers are non-superimposible mirror images of one another (1 point)?