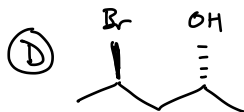
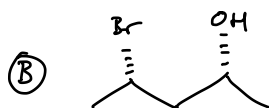
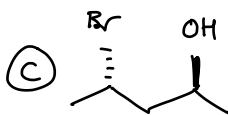
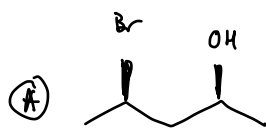
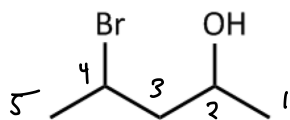


Quiz 5 (50 points)

(note, there was no Q4)

Name Key

1. Show *all* of the stereoisomers of the following compound using the correct symbols and notation to show *unambiguous* stereochemistry. Assign the *configuration* to any stereocenters with the appropriate notation and put these in the appropriate location in the name of the compound, which is 4-bromo-2-pentanol. Show which of the isomers are *enantiomers* and which are *diastereomers*. (note: the structure shown doesn't indicate any stereochemistry or configuration) (35 points)



(A) (2S,3R)-4-bromo-2-pentanol

(B) (2R,3S)-

(C) (2S,3S)-

(D) (2R,3R)-

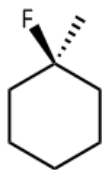
(A) & (B) enantiomers

(C) & (D) enantiomers

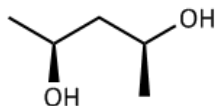
(A) & (C), (A) & (D), (B) & (C), (B) & (D) are diastereomers

2. Label the following as either *chiral* or *achiral*.

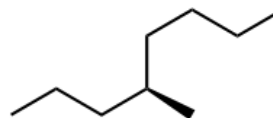
(15 points)



achiral



chiral



chiral