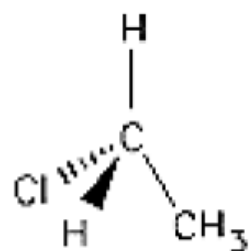
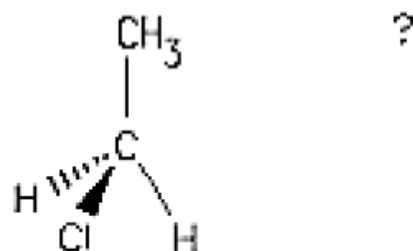
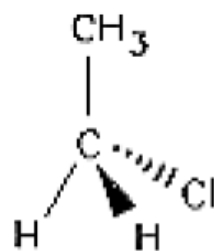


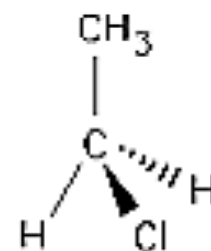
1. Which of the following is the enantiomer of



I



II



III

A) I

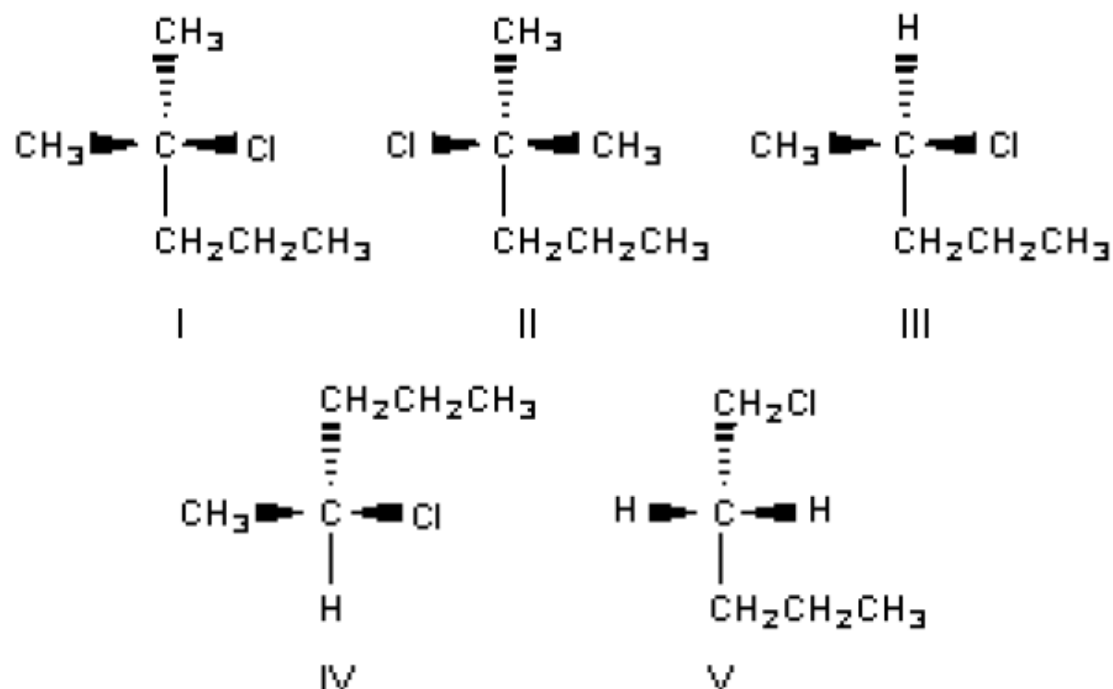
B) II

C) III

D) It does not have a non-superposable enantiomer.

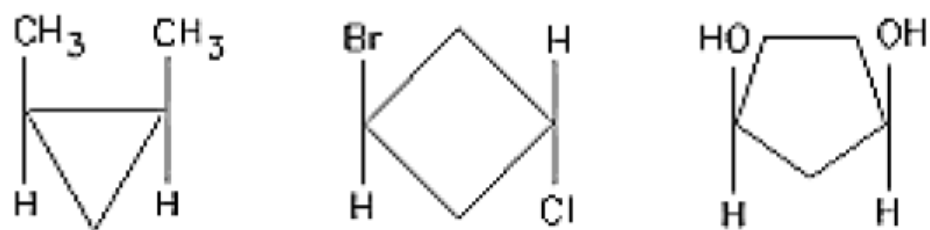
E) Both II and III

5. Pairs of enantiomers are:



- A) I, II and III, IV
- B) I, II
- C) III, IV
- D) IV, V
- E) None of the structures

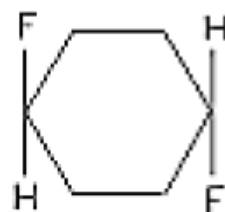
36. Which compound does NOT possess a plane of symmetry?



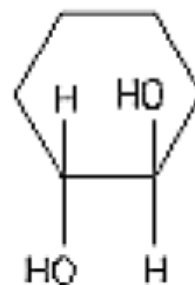
I

II

III



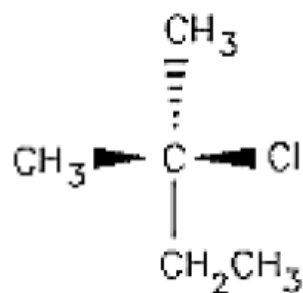
IV



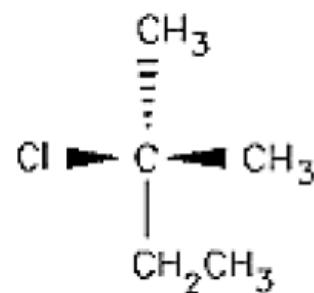
V

- A) I
- B) II
- C) III
- D) IV
- E) V

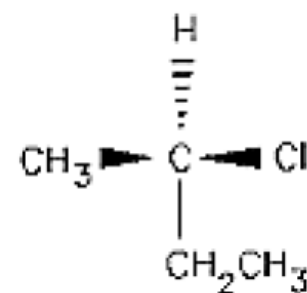
42. (R)-2-Chlorobutane is represented by:



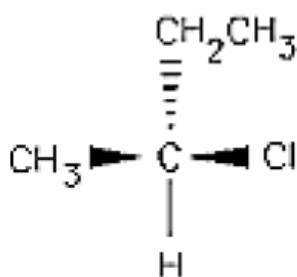
I



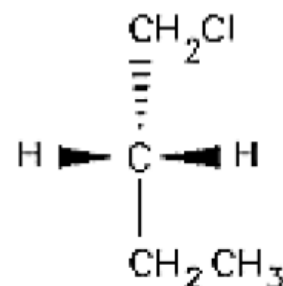
II



III



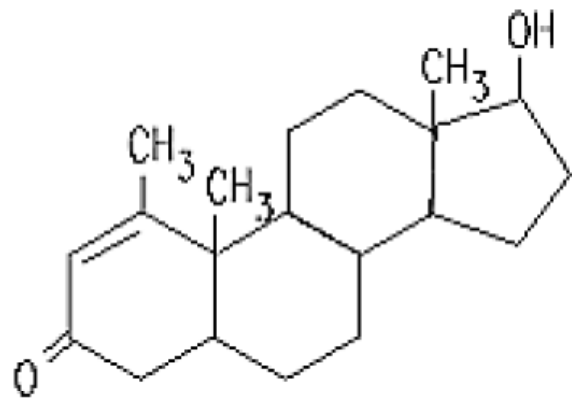
IV



V

- A) I
- B) II
- C) III**
- D) IV
- E) V

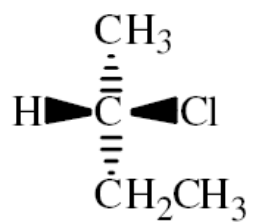
80. How many stereogenic centers are there in the anabolic steroid methenolone?



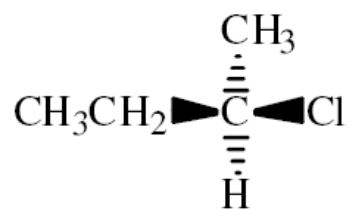
- A) 4
- B) 5
- C) 6
- D) 7
- E) 8



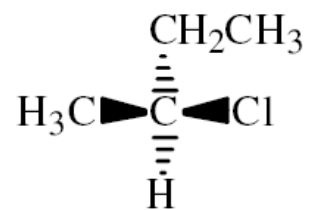
5.20. Which of the following molecules are the same?



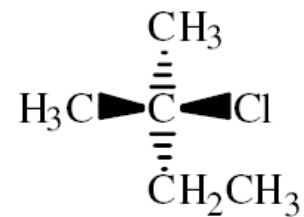
1



2



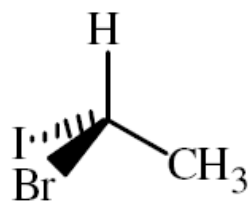
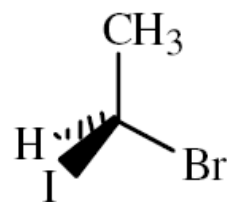
3



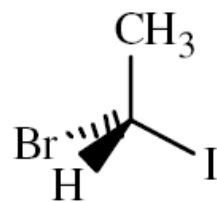
4



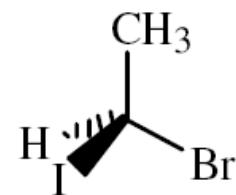
5.21. Which of the three molecules below is the enantiomer of the following molecule?



I



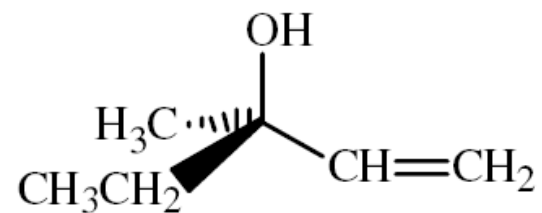
II



III

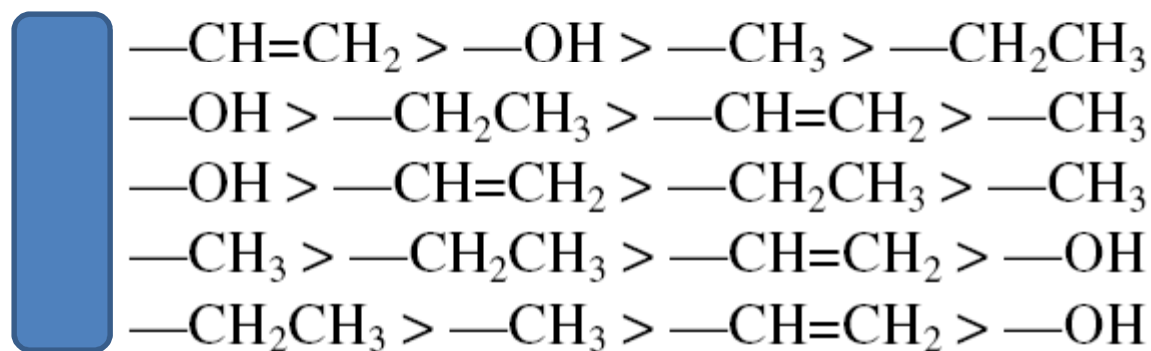


5.34. Which name describes the following structure?

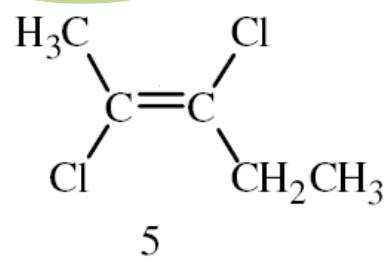
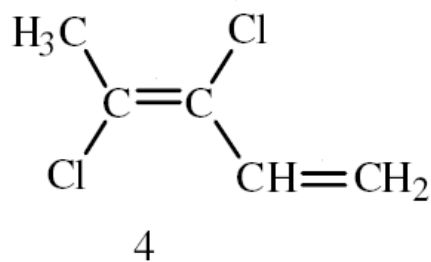
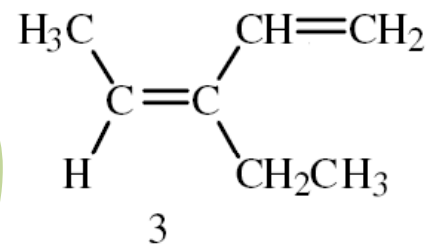
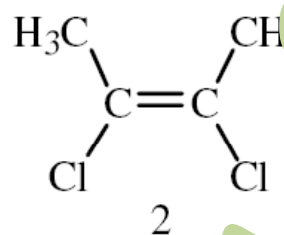
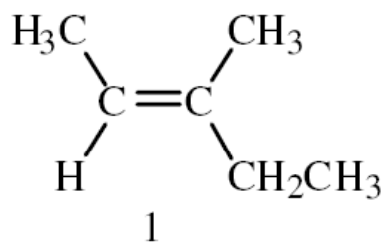


- | | |
|---|---|
| a. (<i>R</i>)-3-methyl-1-penten-3-ol | b. (<i>S</i>)-3-methyl-1-penten-3-ol |
| c. (<i>R</i>)-3-ethyl-1-buten-3-ol | d. (<i>R</i>)-3-methyl-1-pentyn-3-ol |
| e. (<i>S</i>)-3-ethyl-1-buten-3-ol | |

5.33. The priority order for *R/S* nomenclature is



5.31. Of the following structures, how many are classified “E”?



3