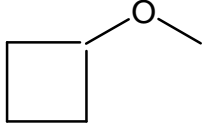
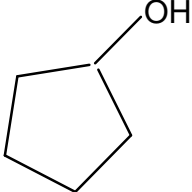
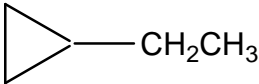
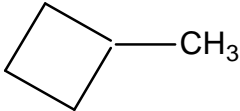
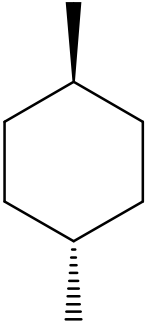
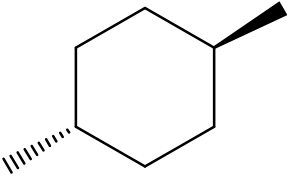
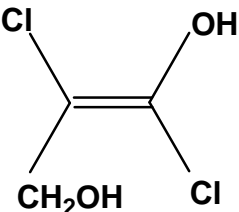
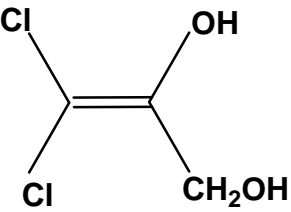


Travaux dirigés (2013-2014)

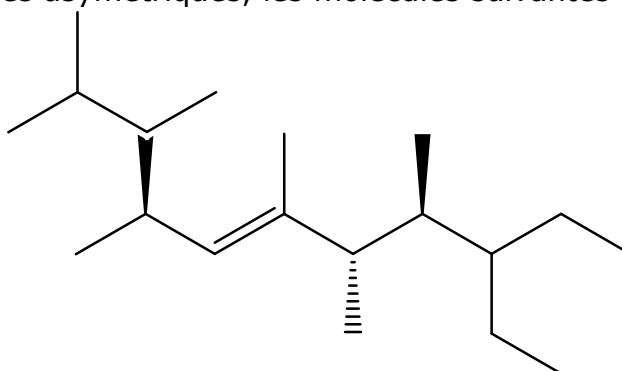
Exercice n°1

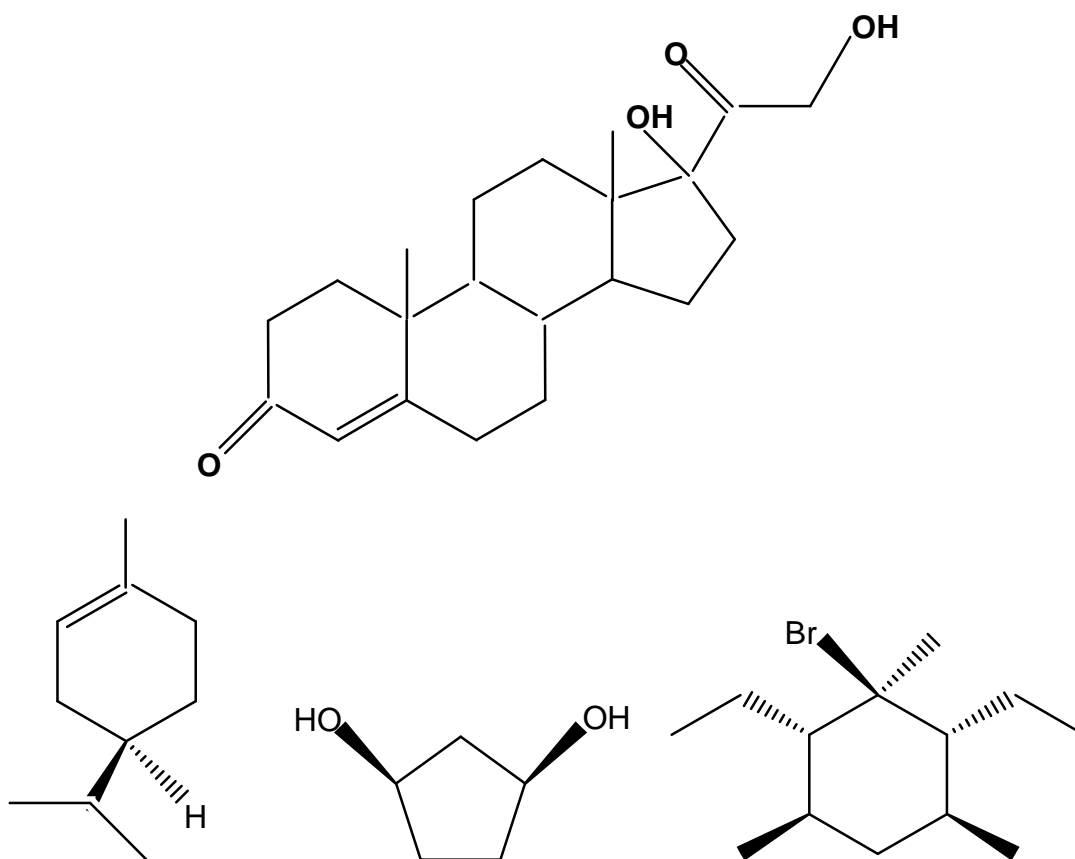
Quelle relation d'isomérie existe-t-il entre chaque paire de molécules ?

Exercice n°2

Combien de carbones asymétriques, les molécules suivantes possèdent-elles ?



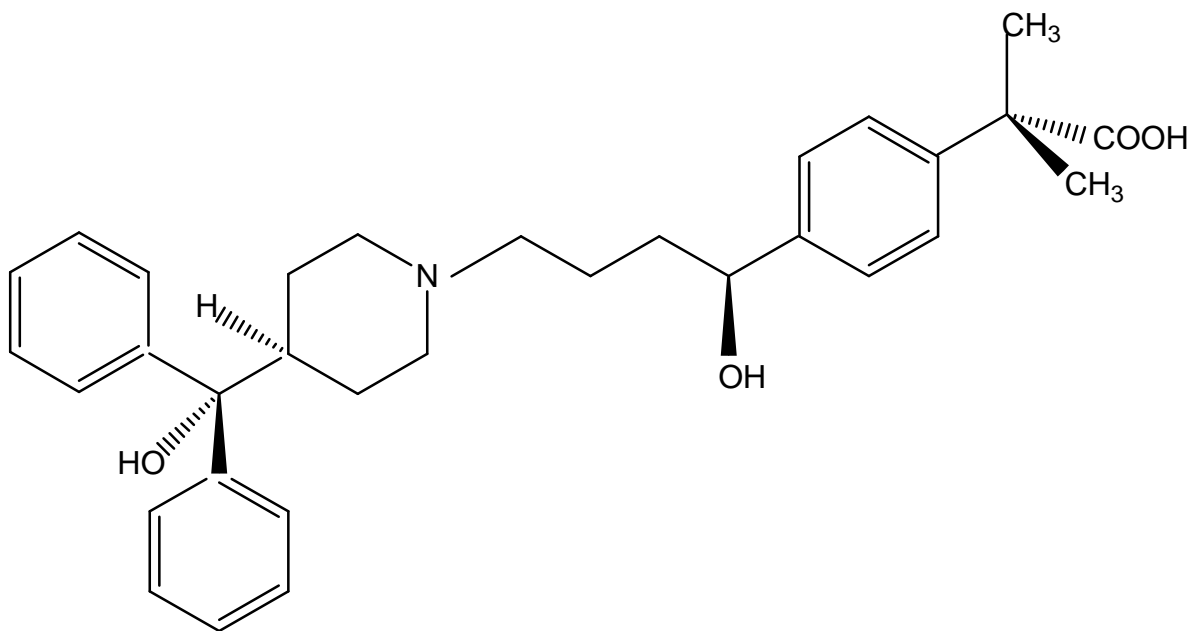
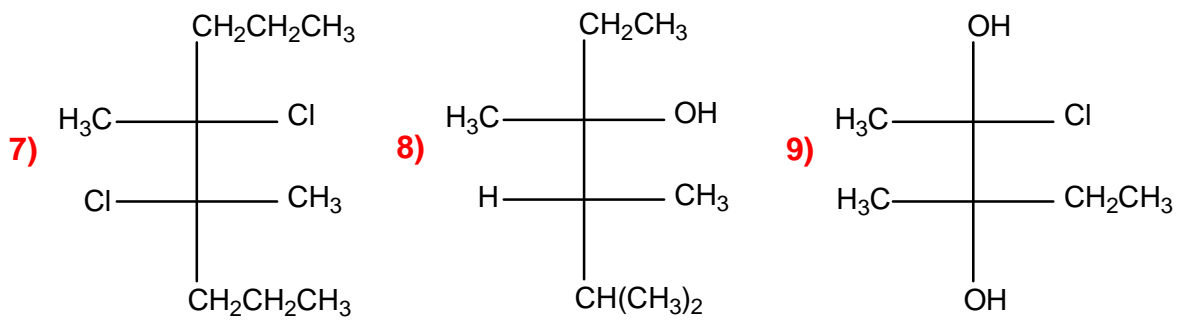
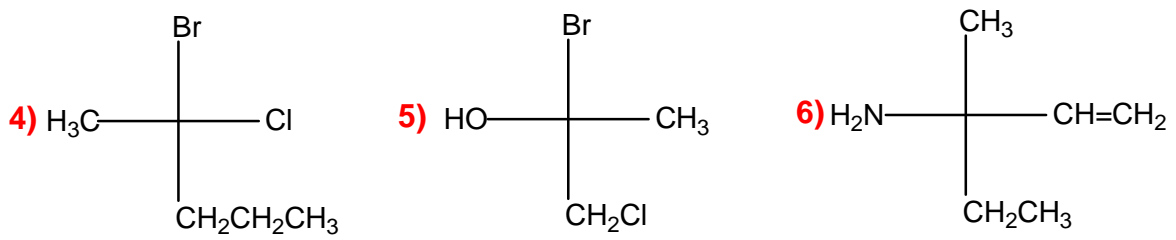
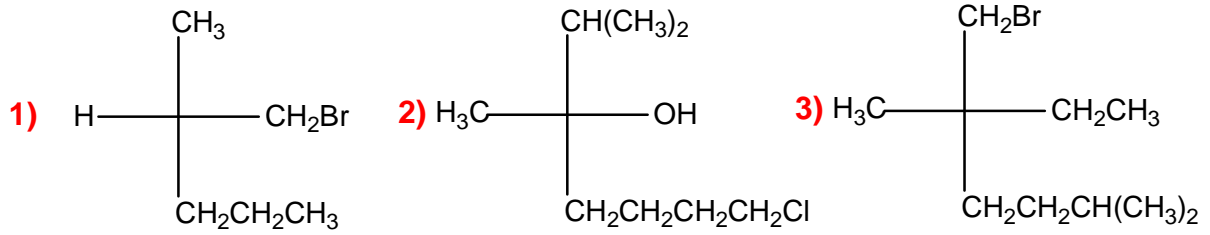
**Exercice n°3**

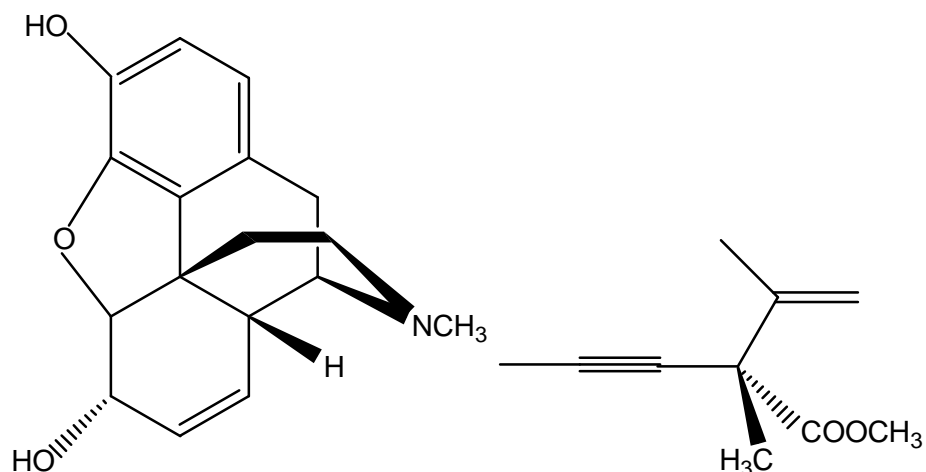
Selon la règle séquentielle de Cahn-Ingold-Prelog, quel est l'ordre de priorité des groupements suivants ?

- | | | | | | |
|-----|----------------------|------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|
| 1) | — CH=O | — CH ₂ OH | — CH ₂ CH=O | — CH ₂ OCH ₃ | — CH ₂ CH ₂ OH |
| 2) | — CH ₂ Cl | — CHBr ₂ | — CH ₂ I | — CH ₂ Br | — CHCl ₂ |
| 3) | — H | — Br | — CH ₂ CH ₃ | — CH ₂ CH ₂ OH | — CN |
| 4) | — COOH | — COOCH ₃ | — CH ₂ OH | — OH | — OCH ₃ |
| 5) | — CN | — CH ₂ NH ₂ | — CH ₂ NHCH ₃ | — NH ₂ | — CH ₃ |
| 6) | — Br | — CH ₂ Br | — Cl | — CH ₂ Cl | — CCl ₃ |
| 7) | — C≡CH | — C(CH ₃) ₃ | — C ₆ H ₅ | — CH=CH ₂ | — CH ₃ |
| 8) | — COCH ₃ | — COOCH ₃ | — CH ₂ OCH ₃ | — CH ₂ CH ₃ | — OCH ₃ |
| 9) | — Br | — CH ₂ Br | — CN | — NH ₂ | — CH ₂ CH ₂ Br |
| 10) | — SH | — C(CH ₃) ₃ | — CH ₂ CH ₃ | — CH(CH ₃) ₂ | — CH=CH ₂ |

Exercice n°4

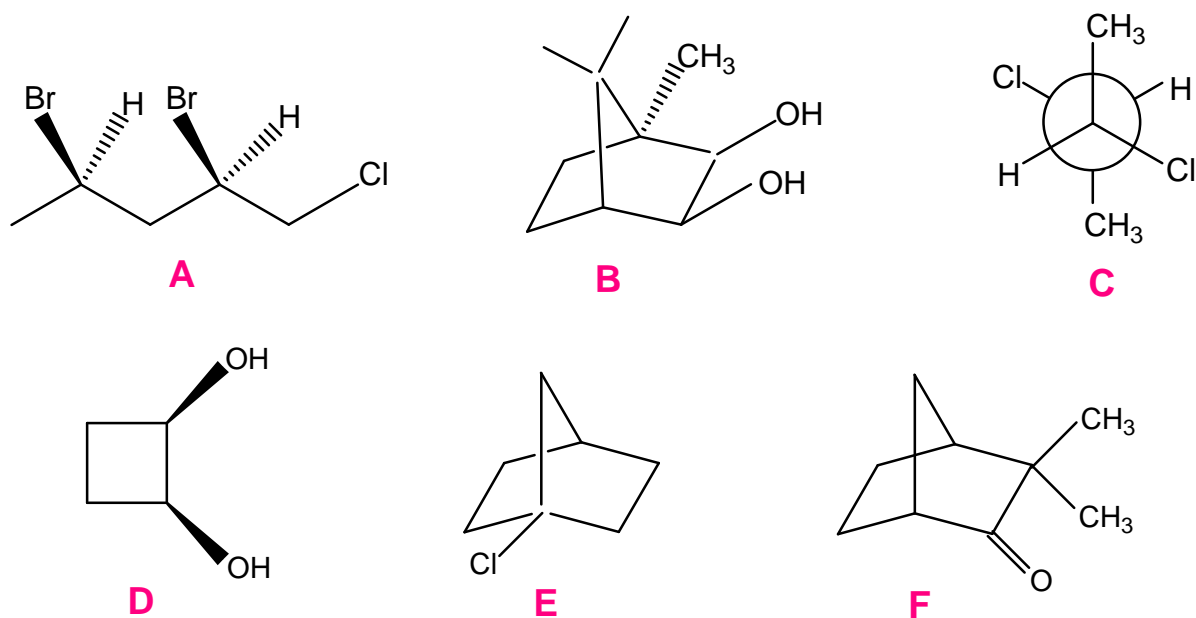
Donner la configuration absolue (R, S) des carbones asymétriques dans les molécules suivantes :





Exercice n°5

Les molécules suivantes sont-elle chirales ?



Exercice n°6

Quelle relation d'isomérisation existe-t-il pour chaque paire de molécules ? **I** (Identiques), **E** (Enantiomères), **D** (Diastéréoisomères), **C** (Isomères de Constitution)

