

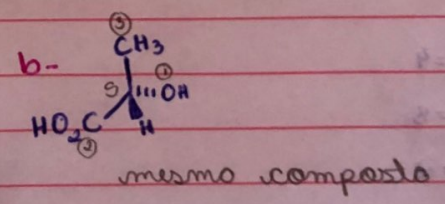
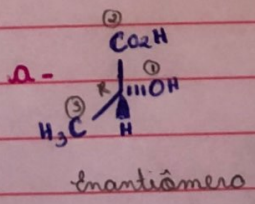
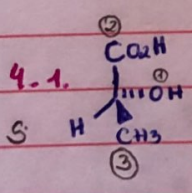
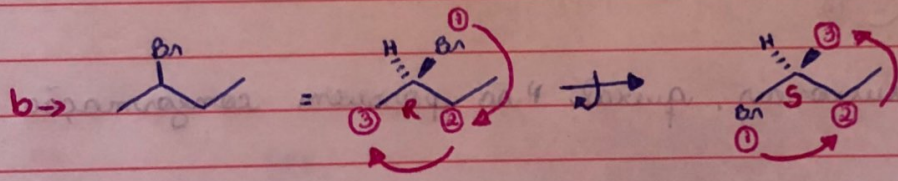
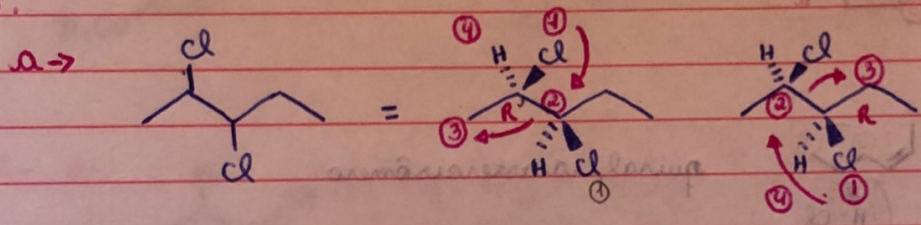
Lista 7.

1- Enantiômeros → 2 isômeros imagem um do outro não sobreponíveis.

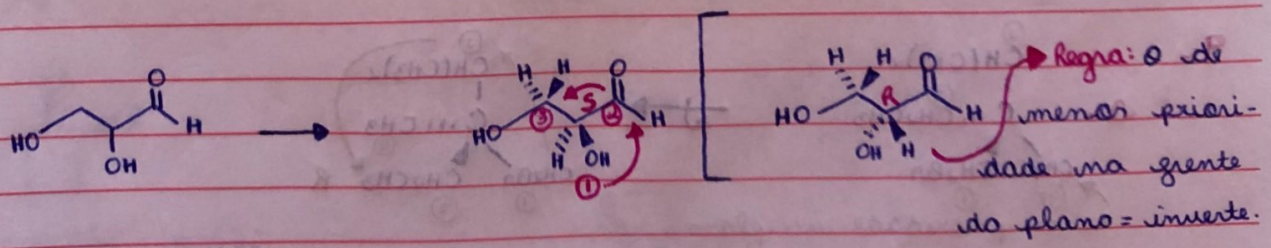
Diastereoisômeros → compostos que apresentam a mesma fórmula, mais de um centro quiral, mas não são imagem um do outro.

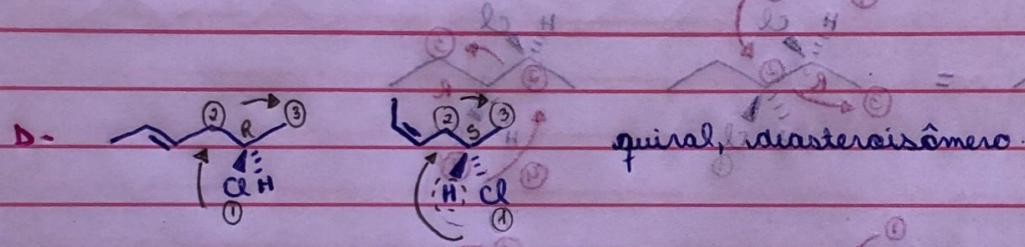
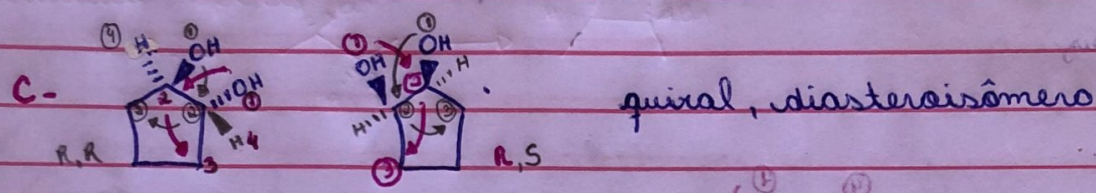
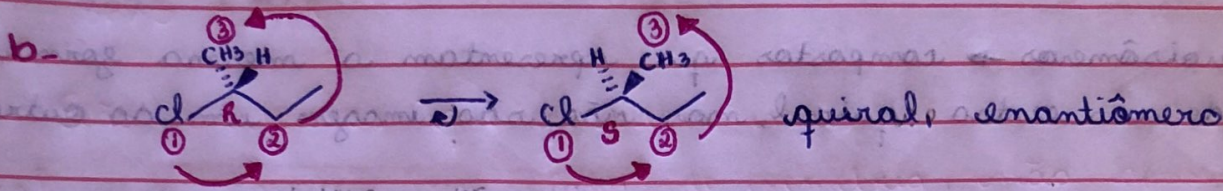
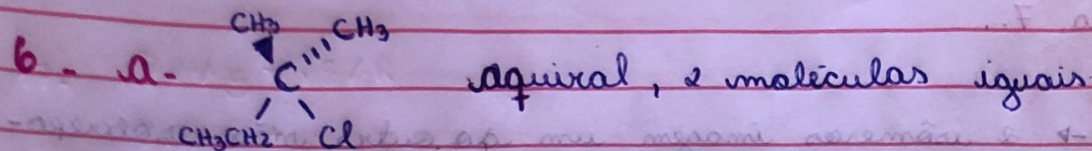
2 → Não, pois não existe nenhuma correlação entre R ou S e o sentido da luz.

3.



5-

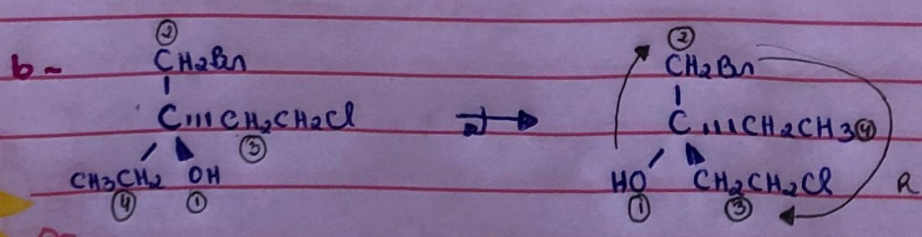
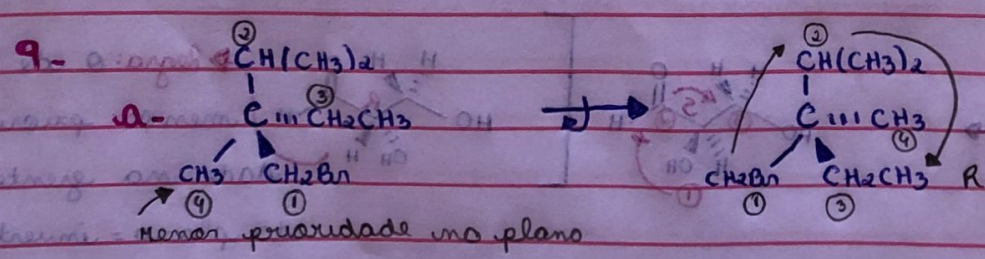


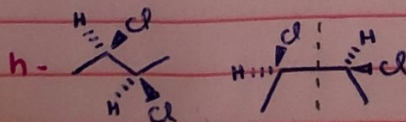
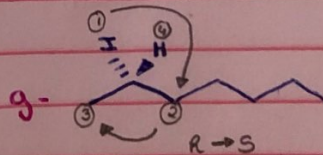
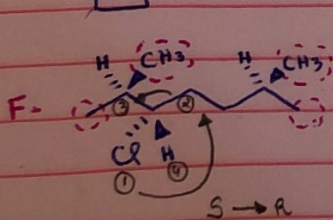
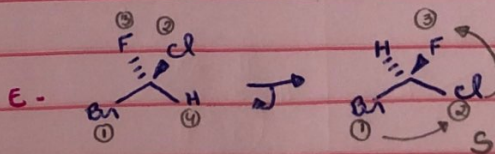
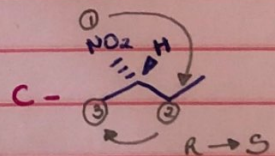
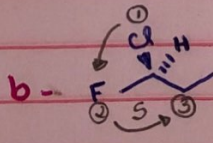
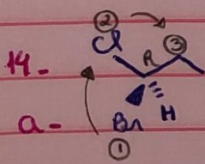
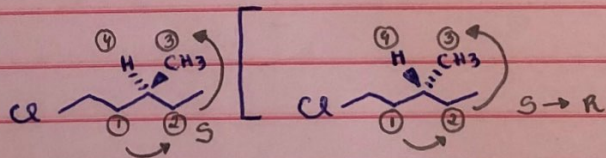
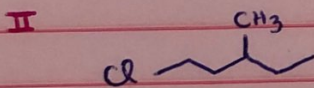
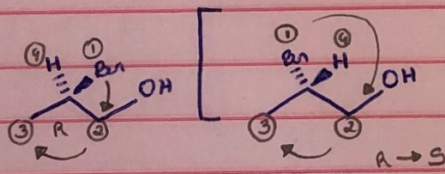
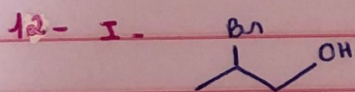
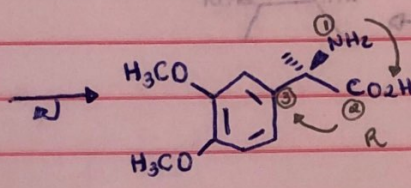
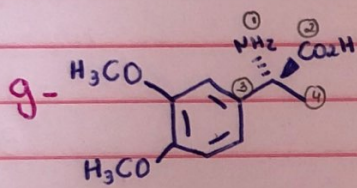
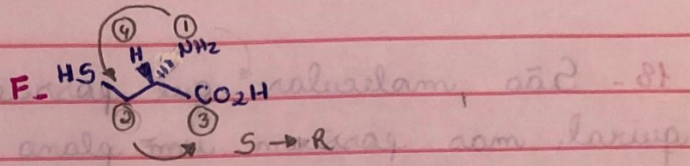
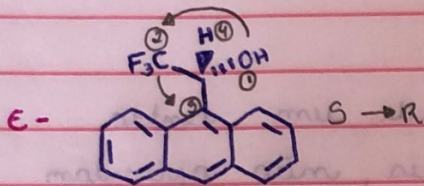
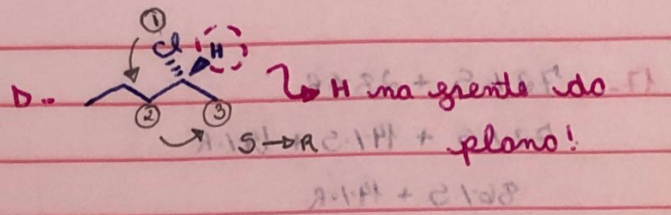
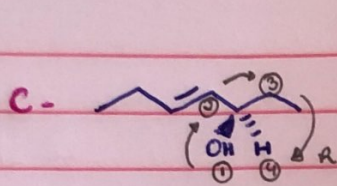


e. isômeros constitucionais, quiral não possuem conformação R/S.

7. Feito já na questão anterior.

- 8. a. $2^2 = 4$
- b. $2^3 = 8$
- c. $2^1 = 2$

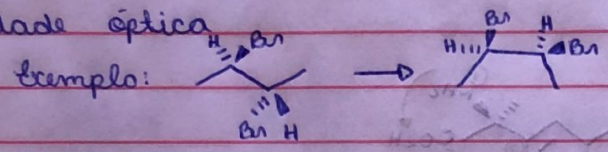




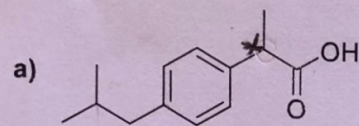


$$17. \quad 72 \cdot 1.5 + 28 \cdot 1.8$$
$$72 \cdot 1.5 + 14 \cdot 1.5 + 14 \cdot 1.8$$
$$86 \cdot 1.5 + 14 \cdot 1.8$$

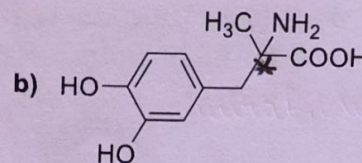
18. São moléculas que possuem mais de um centro quiral, mas possuem um plano de simetria, não apresentam atividade óptica.



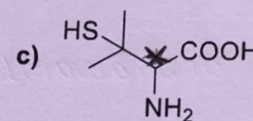
10-



ibuprofeno

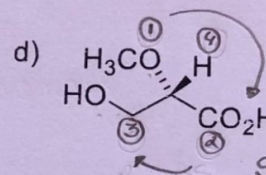
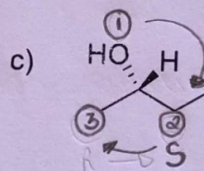
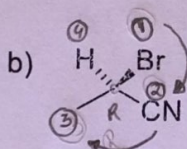
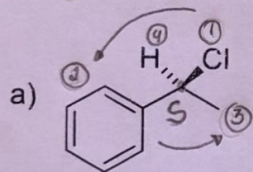


Metildopa



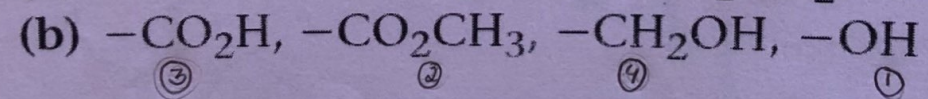
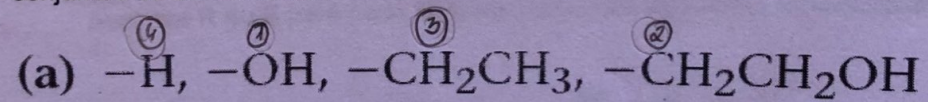
Penicilamina

11- Atribua a configuração (R ou S) dos carbonos assimétricos das moléculas a seguir:



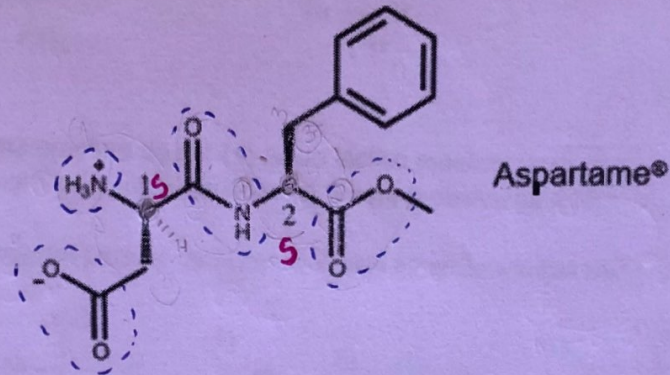
13-

Atribua prioridades de acordo com o sistema de Canh-Ingold-Prelog aos seguintes conjuntos de substituintes:



15. Escreva as fórmulas estruturais dos seguintes compostos:

15. A estrutura química apresentada abaixo é do aspartame, conhecido como adoçante artificial.

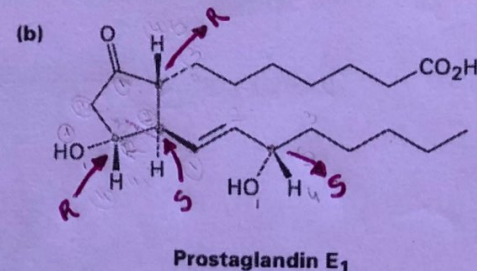
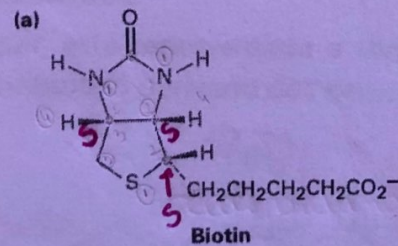


Quais funções químicas estão presentes na estrutura do aspartame, e qual a configuração (R/S) que os carbonos indicados como 1 e 2 apresentam.

A sequência correta é:

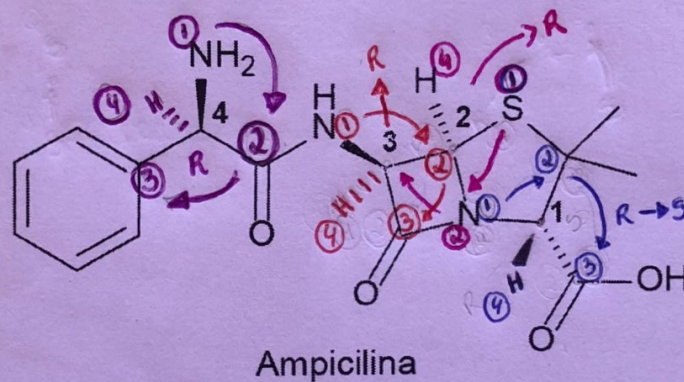
- a) Éster, amida, amônio, ácido carboxílico, 1R, 2S.
- b) Cetona, amina, amônio, ácido carboxílico, 1S, 2S.
- c) Éster, amida, amônio, carboxilato, 1S, 2S.
- d) Éster, amida, amônio, carboxilato, 1S, 2R.

16. Assinale R ou S para cada carbono quiral das seguintes moléculas biológicas:



19. Substâncias formadas por moléculas contendo centros estereogênicos são comumente encontradas em formulações de medicamentos.

A seguir, está representada a fórmula estrutural da Ampicilina, um antibiótico derivado das penicilinas.



A configuração absoluta dos carbonos estereogênicos 1, 2, 3 e 4 do enantiômero da molécula de Ampicilina é, respectivamente,

- a) ~~R, R, R e R.~~
- b) ~~R, S, S e S.~~
- c) S, R, R e R.
- d) ~~S, S, S e S.~~
- e) ~~S, R, S e R.~~