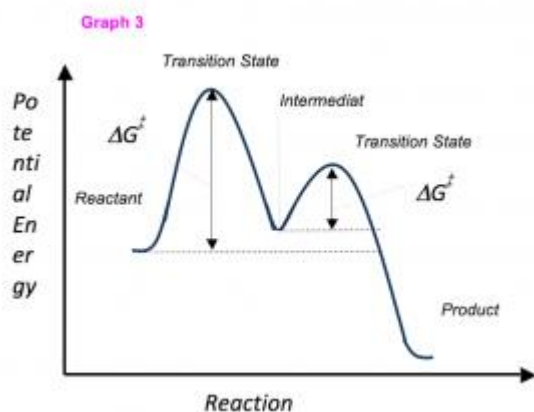


Possíveis respostas para a Lista de Exercícios 3 – Tópico 5

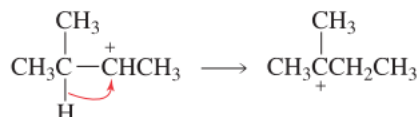
1.



2.

A is secondary carbocation. It will not rearrange because a 1,2-hydride shift would convert it to a different secondary carbocation, so there is no energetic advantage to the rearrangement.

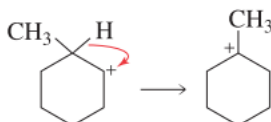
B is a secondary carbocation. It will rearrange because a 1,2-hydride shift converts it to a tertiary carbocation.



C is a tertiary carbocation. It will not rearrange because its stability cannot be improved by rearrangement.

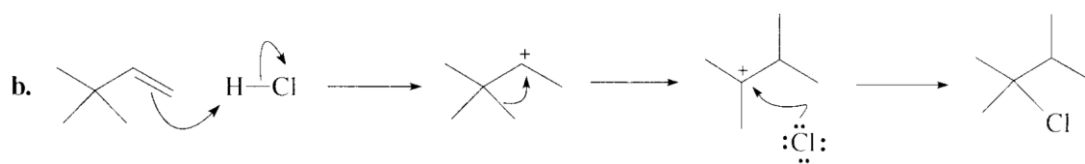
D is a tertiary carbocation. It will not rearrange because its stability cannot be improved by rearrangement.

E is secondary carbocation. It will rearrange because a 1,2-hydride shift converts it to a tertiary carbocation.

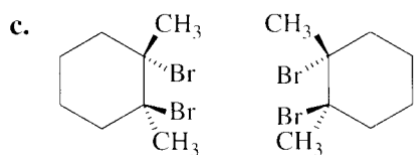
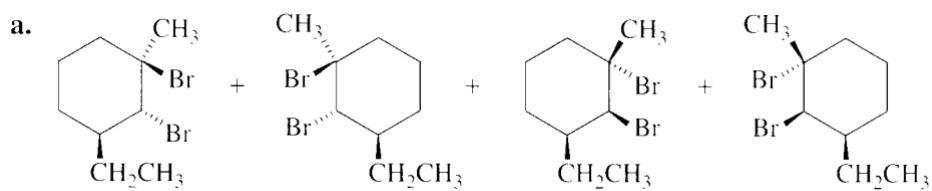


F is a secondary carbocation. It will not rearrange because rearrangement would form another secondary carbocation. _____

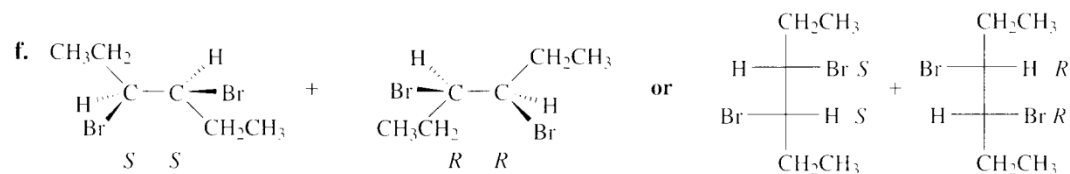
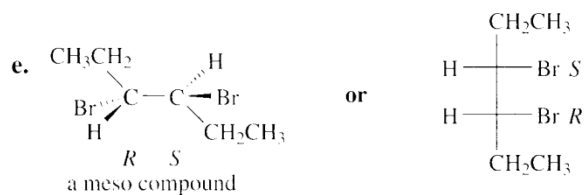
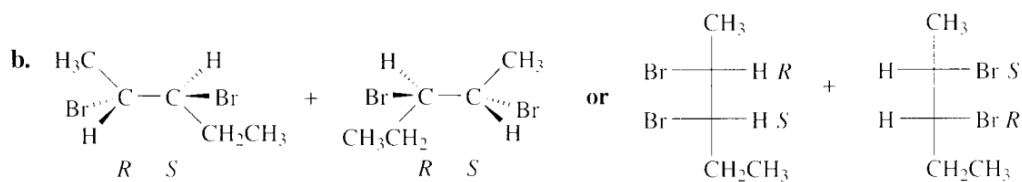
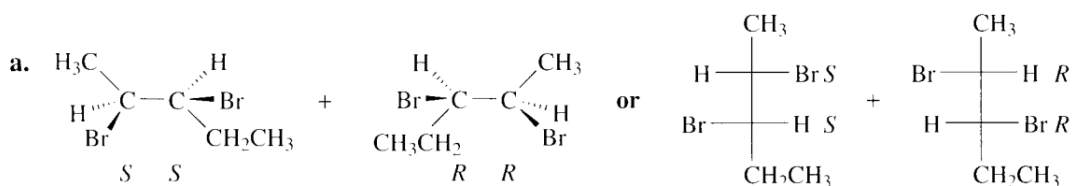
3.



4.



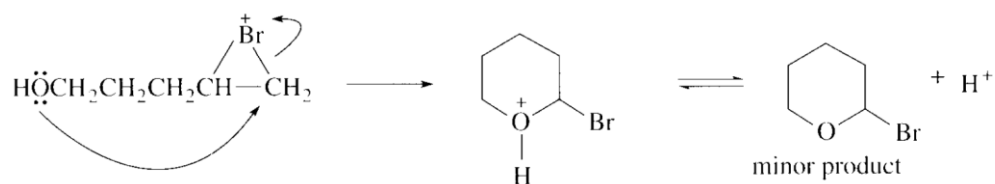
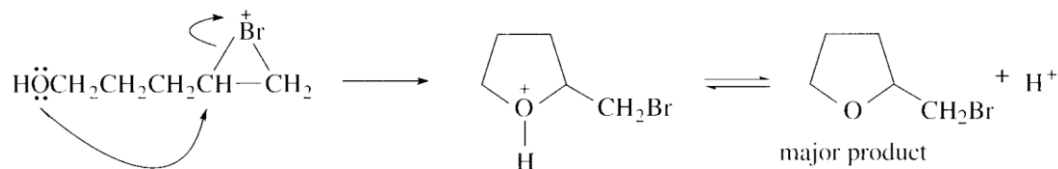
5.



6.

Five- and six-membered rings are more stable than other size rings.

- a. Either a six-membered ring or a five-membered ring can be formed. However, because the more substituted three-membered ring carbon has the larger partial positive charge since it is secondary and the less substituted one is primary, the three-membered ring will break in the direction that forms the five-membered ring.



- b. A six-membered ring will form in preference to a less stable seven-membered ring. (In addition, formation of the six-membered ring involves the preferred attack on the more substituted ring carbon.)

