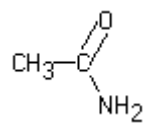
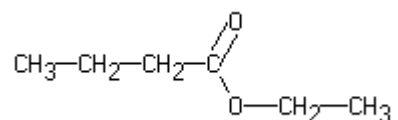
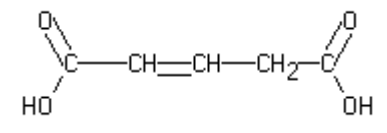
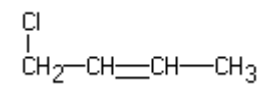
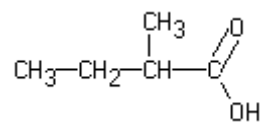
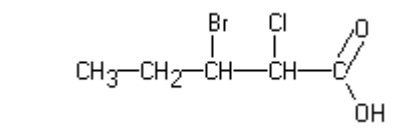
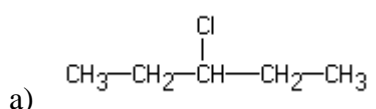


Soluciones:**1.**

a)



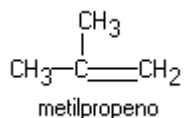
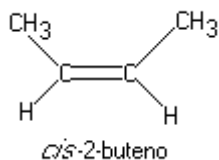
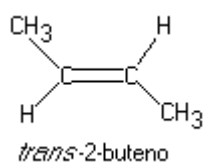
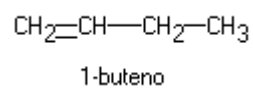
b) 1-cloro-2-buteno y ácido 2-pentenodioico.

2.

b) ácido 3-bromo-2-cloropentanoico y ácido 2-hidroxibutanoico.

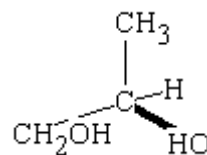
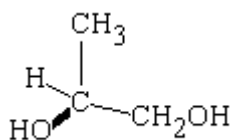
3.

a)

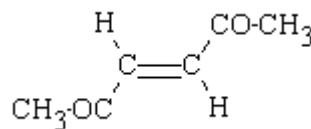
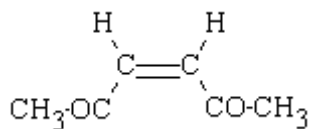
b) Isómeros de cadena: 1-buteno y metilpropeno; *cis*-2-buteno y metilpropeno; *trans*-2-buteno y metilpropeno.Isómeros de posición: 1-buteno y *cis*-2-buteno; 1-buteno y *trans*-2-buteno.Isómeros geométricos: *cis*-2-buteno y *trans*-2-buteno.

4. 3-hexen-2,5-diona; 1,2-propanodiol; acetato de etilo; etilpropilamina; 3-metil-2-butenal.

Puede separarse en enantiómeros el 1,2-propanodiol:



Presenta isomería *cis-trans* la 3-hexen-2,5-diona:



5. Los productos son:

butanona; 1,2-dibromobutano; acetato de butilo; etanol; 1-butanol; acetato de sodio y metanol.