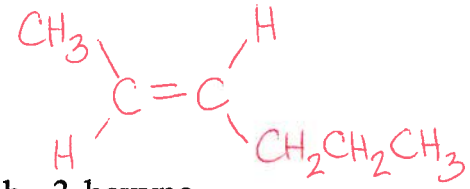
Name: KEY Block:_____ Date:_____

Chemistry 11 **Cis-Trans Isomerization Worksheet** Assignment

Complete the following questions on a separate piece of paper.

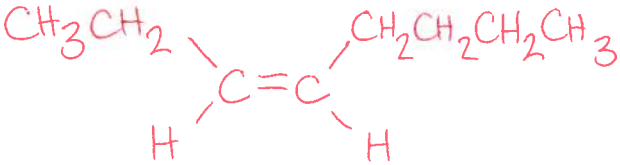
1) Draw the actual shape of the following molecules using condensed structures:

a. trans-2-hexene

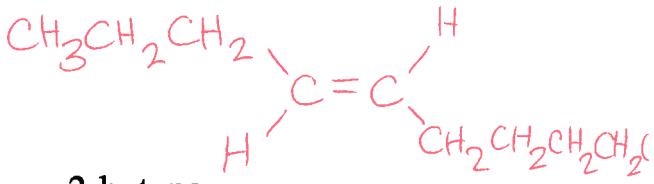


b. 3-hexyne

c. cis-3-octene

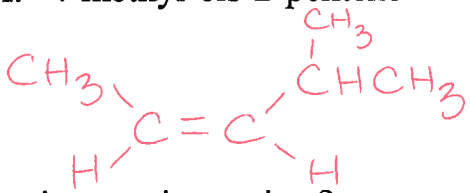


d. trans-4-decene



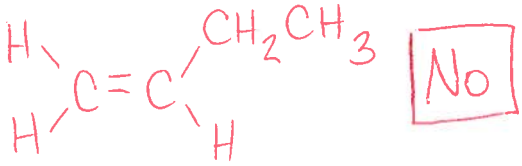
e. 2-butyne

f. 4-methyl-cis-2-pentene

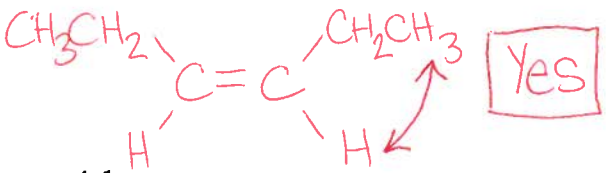


2) Which of the following molecules can exhibit cis-trans isomerism?

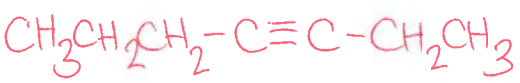
a. 1-butene




b. 3-hexene



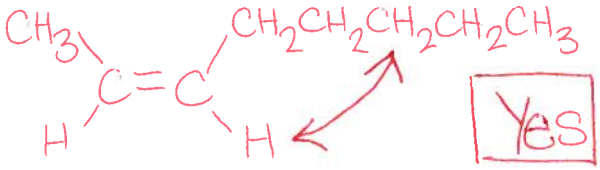

c. 4-heptyne



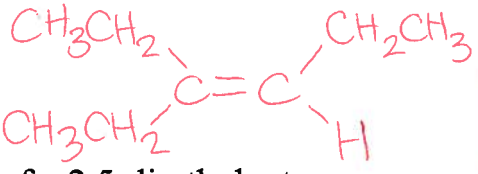
No

*Actually 3-heptyne

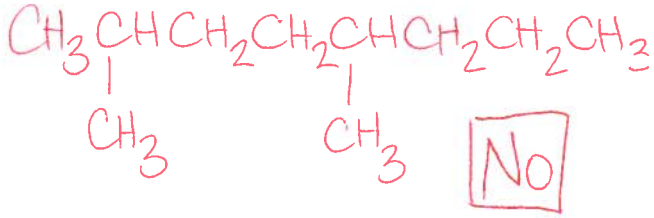
d. 2-octene



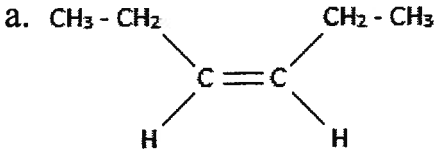

e. 3-ethyl-3-hexene



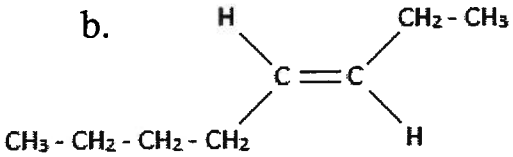

f. 2,5-dimthyloctane



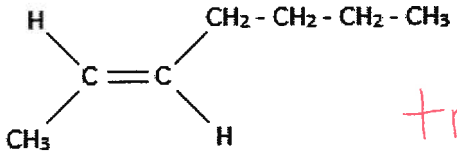
3) Name the following as "cis" or "trans" isomers.

a. 

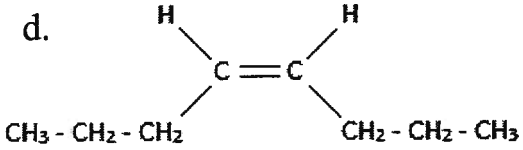

cis-3-hexene

b. 


trans-3-octene

c. 


trans-2-heptene

d. 


cis-4-octene