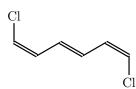
a)



b)



c)

a)

Isolert:



b)

Konjugert:



c)

kumulert:



d)

To konjugerte og en isolert dobbeltbinding:



a)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

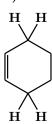
b)

$$\stackrel{\text{HCl}}{\longrightarrow} \stackrel{\text{Cl}}{\longleftarrow}$$

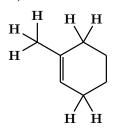
Oppgave 4

Allyliske hydrogen i **bold**.

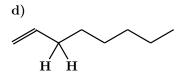
a)



b)



 $\mathbf{c})$



a)

$$\stackrel{\mathrm{NBS}}{\longrightarrow} \stackrel{\mathrm{Br}}{\longmapsto}$$

b)

$$\stackrel{\rm NBS}{\longrightarrow} \stackrel{\rm B}{\longrightarrow}$$

Oppgave 6

a)

$$\begin{array}{c} \overset{\oplus}{\operatorname{CH}_2} \\ \overset{\oplus}{\operatorname{CH}_2} \end{array} \longleftrightarrow \begin{array}{c} \overset{\operatorname{CH}_2}{\operatorname{CH}_2} \\ \overset{\oplus}{\operatorname{CH}_2} \end{array} \longleftrightarrow \begin{array}{c} \overset{\operatorname{CH}_2}{\operatorname{CH}_2} \\ \overset{\oplus}{\operatorname{CH}_2} \end{array}$$

b)

c)

a)

b)

Oppgave 8

a)

b)