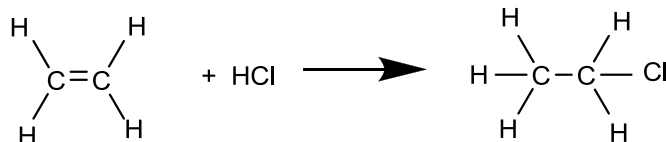


CHE 115 Unit III Practice

- 1 Which group has the most negative electron affinity?
- 2 Element M reacts with chlorine to form  $MCl_2$ . Element M is more reactive than Mg and has a smaller radius than Ba. Element M is?
- 3 Oxides of active metal react with acids to form ?
- 4 List the following elements in increasing atomic radius Ba F Mg O S
- 5 Draw Lewis structures for  $[NO_3]^{-1}$   $CO_2$   $H_2O$   $[CO_3]^{-2}$
- 6 The  $NO^{-1}$  ion has how many valence electrons?
- 7 Use a table of bond dissociation energies to estimate the delta H for the reaction



- 8 Give the molecular geometry for  $CS_2$   $CHCl_3$   $H_2O$
- 9 Draw the Lewis structure for CO. What is the hybridization of the C atom?
- 10 What orbitals overlap in an H-Br bond?
- 11 In ethylene  $\begin{array}{c} H & & H \\ & \backslash & / \\ & C=C \\ & / & \backslash \\ H & & H \end{array}$  what orbitals overlap in the C-C sigma bond?  
In the C-C pi bond?