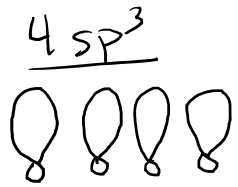
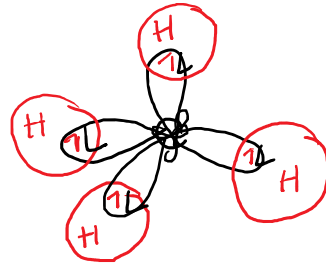
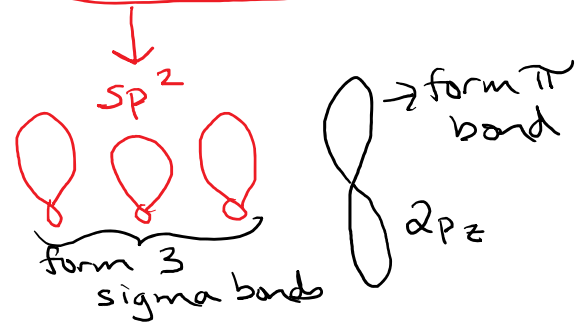
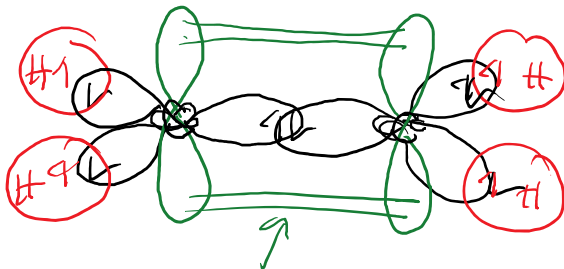
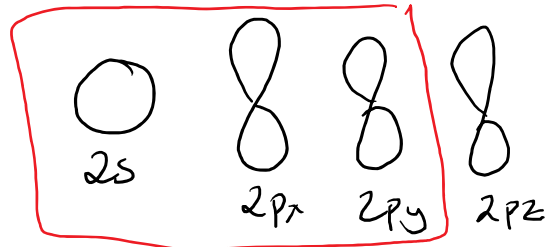
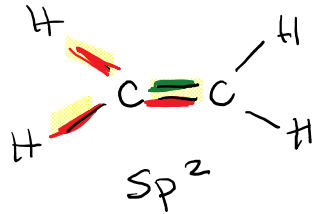


$\text{CH}_4 \rightarrow 4 \text{ bonds} \rightarrow \text{sp}^3$



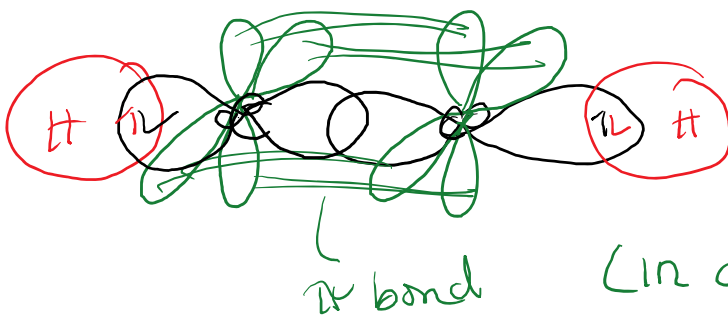
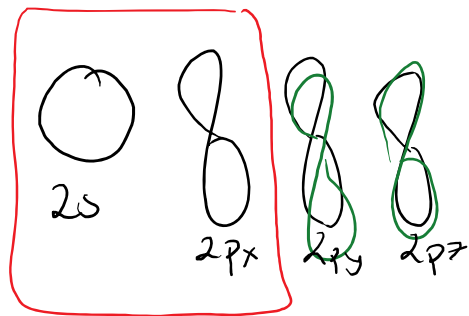
$\text{C}_2\text{H}_4 \rightarrow$ each carbon has 3 negative areas.



π bond (overlap of p orbitals)

π bonds form double + triple bonds

$\text{C}_2\text{H}_2 \rightarrow$ each carbon has 2 negative areas



(in a triple bond \rightarrow one sigma and two pi bonds)