

1. (16 points) What is the Lewis structure and molecular geometry for each of the following molecules?

Name	Lewis Structure	Molecular Geometry	Polar or non polar?
xenon hexafluoride			
ammonia (NH <sub>3</sub> )			
sulfur dioxide			
ozone (O <sub>3</sub> )			
sulfur hexafluoride			
phosphite ion			
water			
Carbon tetra chloride			

3. (2 points) How many  $\pi$  bonds are present in Hydrogen cyanide?

4. (2 points) How many  $\pi$  bonds are present in acetylene, C<sub>2</sub>H<sub>2</sub> ?