

* IV-1 ____C ____NC
** IV-2 ____C ____NC

Chemistry 152
Worksheet 3

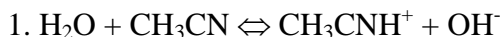
Name: _____

*A. (1.0 pts)

1. Determine the pH of a solution having $[H^+] = 4.8 \times 10^{-3} M$.

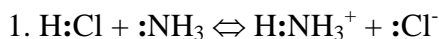
2. Determine the $[H^+]$ of a solution whose pH is 8.23.

**B. (1.0 pts.) Label each indicated substance, in the space provided, as either an acid or a base according to the Bronsted-Lowry theory.





C. (1.0 pts.) Label each indicated substance, in the space provided, as either an acid or a base according to the Lewis theory.





D. (1.0 pts.) Give the conjugate acid for each of the following:



E. (1.0 pts.) Give the conjugate base for each of the following:



F. (2.0 pts.) Determine the $[H^+]$, $[OH^-]$, pH, and pOH of a 0.025M solution of $HClO_3$.

- G. (1.0 pts.) The pH of a 0.10M solution of a weak acid HA was found to be 2.86. Determine the value of K_a for HA.
- H. (2.0 pts.) Determine the pH of a 0.150M solution of HCN. K_a for HCN = 4.0×10^{-10} .