Properties of Acids and Bases

1) Determine the Bronsted-Lowry acid/base pairs in the following equations, and identify which one in each pair is the acid and which is the base:

- $H_2SO_4 + NaOH \rightarrow 2\ H_2O + NaSO_4$

- $HPO_4^{-2} + HBr \rightarrow H_2PO_4^{-1} + Br^-$

- $Ca(OH)_2 + 2\ HNO_3 \rightarrow 2\ H_2O + Ca(NO_3)_2$

- $H_2O + NH_3 \rightarrow NH_4^+ + OH^-$

- $H_2O + HI \rightarrow H_3O^+ + I^-$

2) What is the difference between the Bronsted-Lowry and Arrhenius definition of a base?

