Honors Chemistry Conjugate Acids and Bases

Name____

Identify each acid, base, conjugate acid, and conjugate base.

1.
$$HNO_2 + H_2O \rightarrow H_3O^+ + NO_2^ A \subset A \subset B$$

2.
$$HBrO_4 + H_2O \rightarrow H_3O^+ + BrO_4^-$$

$$A \qquad CA \qquad CA$$

3.
$$H_2O + S^2 \rightarrow HS + OH$$
 $A \subseteq A \subseteq A$

Complete the equation for each of the following acid-base reactions.

7.
$$H_2S + H_2O \rightarrow H_3O^+ + H_5$$

8.
$$NH_3 + H_2O \rightarrow NH_4 + OH$$

$$10. H_3PO_4 + H_2O \rightarrow H_2PO_4 + H_3O^+$$