Weak Acids

1. Find the pH of the .5M solution of the following:
   1. HCN
   2. HCl
   3. KOH
   4. HBrO
2. Find the % dissociation of each in #1
3. For each, find the conjugate A/B pairs
   1. H3PO4 + H2O 🡨🡪 H2PO4- + H3O+
   2. CO3-2‑ + H2O 🡨🡪 HCO3-1 + OH-
   3. N2H4 + H2O 🡨🡪 N2H5+ + OH-
   4. H2Se + H2O (finish the reaction)
4. A weak acid, HQ, is .2M and has a pH of 3.1. Find its Ka and %dissociation.
5. If HClO has a pH of 4.13, find its molarity and % dissociation.
6. 0.4M HZ has a % dissociation of 0.04%. Find its pH and Ka
7. The pH of HY is 2.9 and is .1% dissociation. Find [HY] and Ka.
8. 1.3g of acetic acid are dissolved in 100mL. Find its pH
9. 1.3g HClO4 is dissolved in 100 L. Find its pH.