# CHEM 36 <br> General Chemistry <br> Quiz \#5 

March 8, 2002

## Name:

$\qquad$

1. The pH of a solution is 5.00 -- calculate the concentration (in $\mathrm{mol} / \mathrm{L}$ ) of $\mathrm{H}^{+}$in the solution.
2. The pOH of a solution is 5.00 -- calculate the concentration (in $\mathrm{mol} / \mathrm{L}$ ) of $\mathrm{H}^{+}$ in the solution.
3. The conjugate acid of $\mathrm{NH}_{3}$ is the ammonium ion $\left(\mathrm{NH}_{4}{ }^{+}\right)$. If $\mathrm{K}_{\mathrm{b}}$ for ammonia is equal to $1.8 \times 10^{-5}$, is the ammonium ion a stronger or weaker acid than acetic acid $\left(\mathrm{K}_{\mathrm{a}}=1.8 \times 10^{-5}\right)$ ? Explain.
