## More Chapters 14 Study Questions

1. Calculate the pH of a $0.030 \mathrm{M} \mathrm{NH}_{4} \mathrm{Cl}$ solution.
2. Calculate the pH of a 0.14 M solution of NaF .
3. Find the pH of the following solution: 6.00 mL of $3.00 \mathrm{M} \mathrm{HNO}_{3}$ diluted to a volume of 18.0 liters with water.
4. Write a balanced net ionic equation for the reaction between $\mathrm{NH}_{4}{ }^{+}$and NaOH . What are the conjugate acid/base pairs in this reaction?
5. Which of the following has the highest pH ?
a) 0.10 M NaCl
b) 0.10 M HCl
c) 0.10 M NaOH
d) $0.10 \mathrm{M} \mathrm{NaNO}_{2}$
