Write a reaction equation for each of the following compounds or write NO REACTION if no reaction would occur. **Circle** any answers that will result in a **buffer** solution.

- a) 0.25M HCl + 0.25M HF
- b) 0.15M HI + 0.20M CsOH
- c) $0.50M \text{ HNO}_2 + 0.35M \text{ KNO}_2$
- d) $0.25M Ba(OH)_2 + 0.70M NH_3$
- e) $0.85M NH_3 + 0.60M NH_4$

15.0 mL of 0.61 M NaOH is added to a 100. mL solution of 0.279 M H_3BO_3 . What is the equilibrium concentration of $H_2BrO_3^-$ ions? (K_a for $H_3BO_3 = 5.8 \times 10^{-10}$)