1. **STUDY CHECK**

Calculate the PH of: (a) a 0.001M H_2SO_4 solution (b) a 0.001M NaOH solution.

Show work:

Write just the final answer here:

2. **STUDY CHECK**

Calculate the PH of a 0.002M aniline solution. $K_b = 7.4 \times 10^{-10}$

Show work:

Write just the final answer here:

3. **STUDY CHECK**

Calculate the PH of a 0.01M sodium acetate (CH_3COONa). $K_a = 1.75 \times 10^{-5}$

Show work:

Write just the final answer here:

4. **STUDY CHECK**
Calculate the percent dissociation of a 0.05M methylamine CH_3NH_2 solution. $K_b = 4.4 \times 10^{-4}$

Show work:

Write just the final answer here:

5. **STUDY CHECK**
Calculate the PH of a 0.2M HF/0.3M KF ($K_a = 6.30 \times 10^{-4}$).

Show work:

Write just the final answer here:

6. **STUDY CHECK**

Calculate the PH of 5mL of a 0.2M HF/0.3M KF ($K_a = 6.30 \times 10^{-4}$) after adding 1mL of HCl 0.2M.

Show work:

Write just the final answer here:

7. **STUDY CHECK**

A 5mL sample of 2M H_2SO_4 is titrated with with 25 mL of a NaOH 1M solution. (a) indicate whether you are before, after or at the endpoint (b) indicate whether the titrate is an acid or a base, and a weak or a strong electrolyte (c) indicate the formula that would need to be used to calculate the PH (d) calculate the PH

Show work:

Write just the final answer here:

8. **STUDY CHECK**

A 1mL sample of 2M NH_3 (1.80×10^{-5}) is titrated with with 2 mL of a NaOH 1M solution. (a) indicate whether you are before, after or at the endpoint (b) indicate whether the titrate is an acid or a base, and a weak or a strong electrolyte (c) indicate the formula that would need to be used to calculate the PH (d) calculate the PH

Show work:

Write just the final answer here: