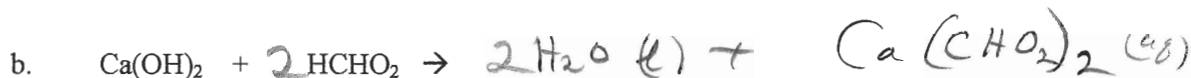
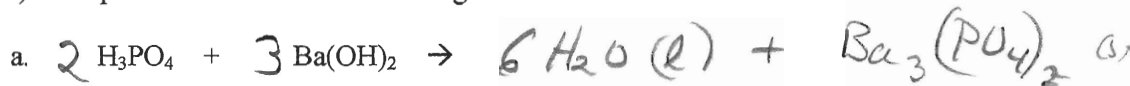


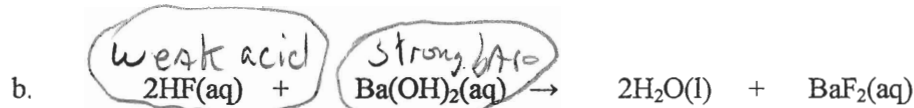
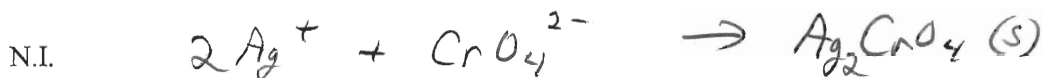
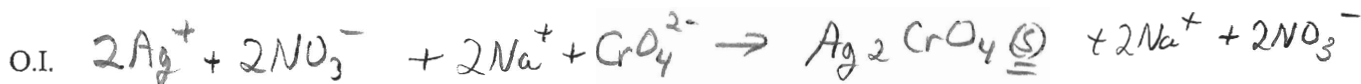
1. (6 Pts) Give the correct name and formula for 3 strong acids and three strong bases.

Acids see book or notes Bases  
 \_\_\_\_\_ LiOH \_\_\_\_\_  
 \_\_\_\_\_ NaOH \_\_\_\_\_  
 \_\_\_\_\_ KOH \_\_\_\_\_

2. (4 Pts) Complete and balance the following reactions:



3. (8 pts) Give the overall ionic (O.I.) and the net ionic (N.I.) equation for the following reactions



4. (7 Pts) An excess of sulfuric acid (molar mass = 98.08 g/mol) was combined with 5.00 g of barium hydroxide (molar mass = 171.3 g/mol). If 5.20 g of barium sulfate (molar mass = 223.4 g/mol) was recovered, determine both the theoretical yield and percent yield. SHOW ALL WORK TO RECEIVE CREDIT.



$$\frac{5.00 \text{ g Ba}(\text{OH})_2}{171.3 \text{ g Ba}(\text{OH})_2} \times \frac{1 \text{ mol Ba}(\text{OH})_2}{1 \text{ mol Ba}(\text{OH})_2} \times \frac{1 \text{ mol BaSO}_4}{1 \text{ mol Ba}(\text{OH})_2} \times \frac{223.4 \text{ g BaSO}_4}{1 \text{ mol BaSO}_4} = 6.52 \text{ g BaSO}_4 \text{ Th. yld}$$

$$\frac{5.20}{6.52} \times 100 = 79.8\% \text{ yld}$$

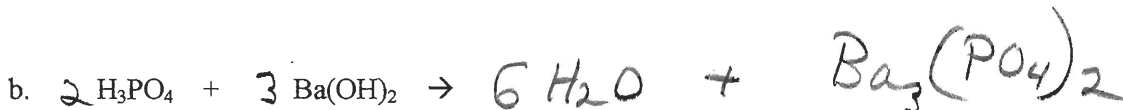
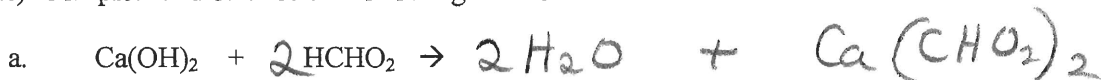
1. (6 Pts) Give the correct name and formula for 3 strong acids and three strong bases.

Bases

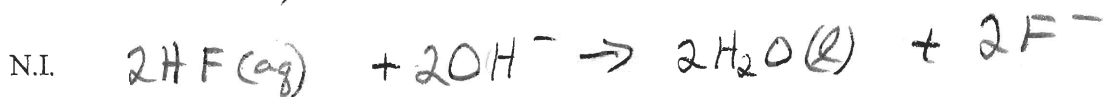
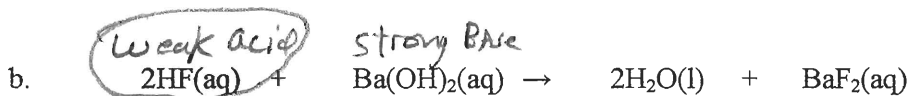
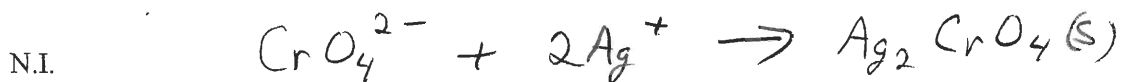
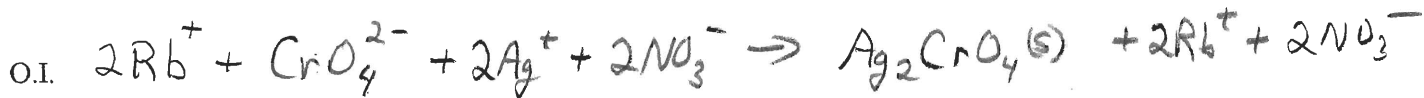
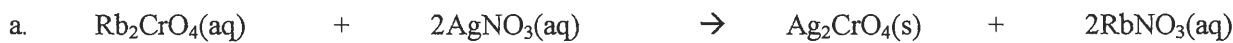
Acids

See book or notes

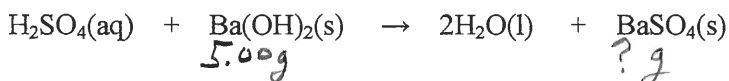
2. (4 Pts) Complete and balance the following reactions:



3. (8 pts) Give the overall ionic (O.I.) and the net ionic (N.I.) equation for the following reactions



4. (7 Pts) An excess of sulfuric acid (molar mass = 98.08 g/mol) was combined with 5.00 g of barium hydroxide (molar mass = 171.3 g/mol). If 4.70 g of barium sulfate (molar mass = 233.4 g/mol) was recovered, determine both the theoretical yield and percent yield. SHOW ALL WORK TO RECEIVE CREDIT.



$$\frac{5.00 \text{ g Ba(OH)}_2}{171.3 \text{ g Ba(OH)}_2} \times \frac{1 \text{ mol Ba(OH)}_2}{1 \text{ mol Ba(OH)}_2} \times \frac{1 \text{ mol BaSO}_4}{1 \text{ mol Ba(OH)}_2} \times 233.4 \text{ g BaSO}_4 = 6.52 \text{ g BaSO}_4$$

$$\frac{4.70}{6.52} \times 100 = 72.1\% \text{ Actual yld}$$

*theor. yld*