

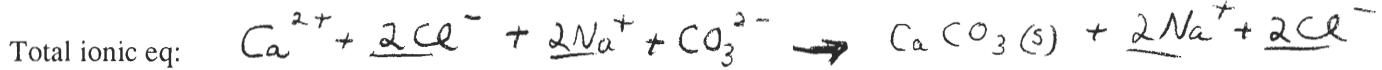
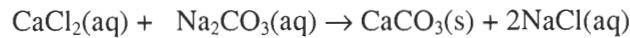
1. (2 Pts) Give the formulas for one strong acid and one strong base. Acid \_\_\_\_\_ Base \_\_\_\_\_

2. (3 Pts) What is the potassium ion concentration in 100.0 mL of 2.5 M  $K_3PO_4$  solution?

$$3 \times 2.5 = 7.5M$$

3. (12 Pts) Write the balanced molecular total ionic and net ionic equations for the following reactions. If no reaction is expected, write "no reaction."

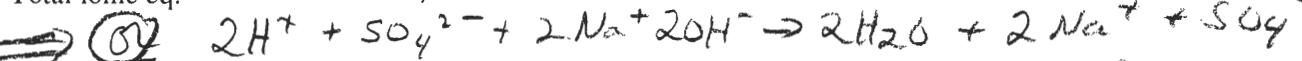
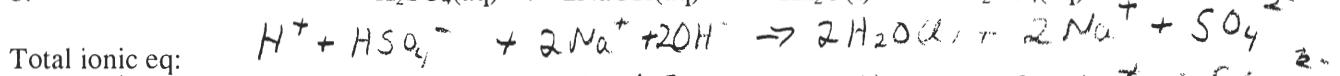
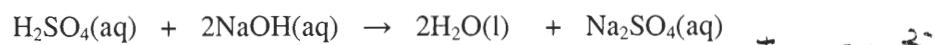
a.



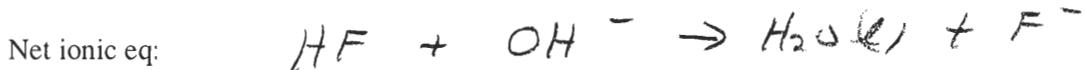
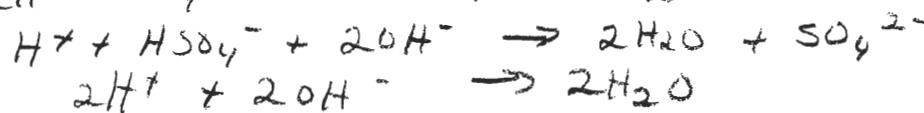
Net ionic eq:



b.

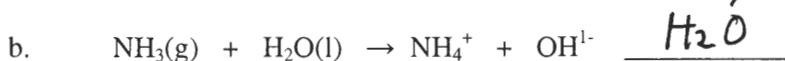
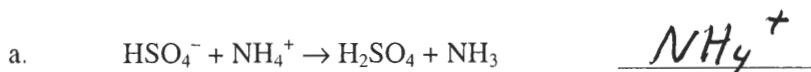


Net ionic eq:



\*This format is true for weak acids with strong bases

4. (4 Pts) Which substance is acting as a Brønsted acid in the following reactions?



5. (4 Pts) Complete and balance each of the following reactions.

