This quiz is take-home and open book, and it is intended that all members of the group contribute to completing it. It is a violation of the Academic Honor Code to sign a quiz that you did not work on. **The quiz is due at the end of class on Thursday, March 18.**
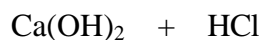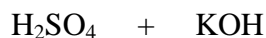
List names in alphabetical order, and give social security numbers! Put names on all pages, and staple pages together

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Points

(2)   1.   For each of the following substances, write the dissociation reaction forming ions in aqueous solution, and classify the substance as an **acid** or a **base**.

$Ba(OH)_2$

HBr

H_2SO_4

NH_3

(3)   2.   Write the **neutralization** reaction for the following reactions between an acid and a base:

HI   +   NaOH

H_2SO_4 +   KOH

$Ca(OH)_2$ +   HCl

List names in alphabetical order. **Be sure to staple pages together!**

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(2)   3.   Calculate the **molarity** of NaCl in a solution prepared by adding 3.26 grams of NaCl to enough water to make a volume of 725 mL

(4)   4.   Calculate the **molarity** of H^+ produced by dissolving the following acids in enough water to make 625 mL of solution:

(a)   45.1 grams of H_2SO_4 (assuming complete dissociation)

(b)   32.2 grams of HI

(4)   5.   Calculate the **molarity** of **OH⁻** produced by dissolving the following bases in enough water to make 375 mL of solution:

(a) 29.6 grams of NaOH

(b) 42.1 grams of $Sr(OH)_2$.