

6) Sulfuric acid, $\text{H}_2\text{SO}_4(\text{aq})$, can be used to neutralize barium hydroxide, $\text{Ba}(\text{OH})_2(\text{aq})$.

What is the formula for the salt produced by this neutralization?

- A) BaSO_3 B) BaSO_2 C) BaS D) BaSO_4

7) Which reactants form the salt $\text{CaSO}_4(\text{s})$ in a neutralization reaction?

- A) $\text{H}_2\text{SO}_4(\text{aq})$ and $\text{Ca}(\text{OH})_2(\text{aq})$ C) $\text{SO}_2(\text{g})$ and $\text{CaO}(\text{s})$
B) $\text{H}_2\text{SO}_3(\text{aq})$ and $\text{Ca}(\text{NO}_3)_2(\text{aq})$ D) $\text{H}_2\text{S}(\text{g})$ and $\text{Ca}(\text{ClO}_4)_2(\text{s})$

Refer to Tables K, L, E & Periodic Table to complete the following equations.

1) Nitrous Acid + Lithium Hydroxide

a) Molecular equation:

b) Ionic equation:

c) Net ionic equation:

d) Name of salt formed:

2) Sulfurous Acid + Barium Hydroxide

a) Molecular equation:

b) Ionic equation:

c) Net ionic equation:

d) Name of salt formed:

SHOW ALL WORK: Circle & label keywords, show correct numerical set up & calculate

$$M_A \cdot V_A = M_B \cdot V_B$$

1) How many ml of 1.5 M NaOH are needed to completely neutralize 75 ml of 3.0 M HCl?

2) How many ml of 0.25 M HNO_3 are needed to completely neutralize 55 ml of 0.50 M KOH ?

MORE CHALLENGING QUESTIONS

1) How many ml of 1.0 M NaOH are needed to completely neutralize 50. ml of 1.0 M H_2SO_4 ? (**Note:** 2 H in H_2SO_4)

2) Phosphoric Acid + Potassium Hydroxide

a) Molecular equation:

b) Ionic equation:

c) Net ionic equation:

d) Name of salt formed: