PSC-4012 Quiz 10

Name:

Date:

1. The human stomach produces hydrochloric acid (HCl), commonly known as "stomach acid". It is generated in the digestion process, but when a person eats something requiring the stomach to work overtime in digesting it- say, a pizza- the stomach may generate excess hydrochloric acid, and the result is "heartburn". When this happens, people often take antacids, which contain a base called magnesium hydroxide ($Mg(OH)_2$).

   a) Write the balanced chemical equation for the reaction between hydrochloric acid and magnesium hydroxide.

   b) Explain why this reaction is considered to be a "neutralization" reaction.

2. In a chemistry lab some nitric acid (HNO_3) is accidentally spilled on the floor. The instructor pours sodium hydroxide (NaOH) into the spilled acid.

   a) Write the balanced chemical equation for the reaction that occurs.

   b) Explain why this reaction is considered to be a "neutralization" reaction.