**Writing Complete Equations Review Sheet – General**

Write complete equations for each of the following reactions. Each question is graded on five criteria: Is the basic equation present, is the equation balanced, are the symbols of state accurate, are the symbols around the arrow correct, and is the H term correct?

1. When metallic iron is exposed to oxygen (O2) in heated air, iron (III) oxide (Fe2O3) powder (also known as rust) is formed.
2. When a solution of ammonia (NH3) is combined with liquid acetic acid (C2H4O2), dissolved ammonium acetate (NH4C2H3O2) is formed in an exothermic reaction.
3. When acetylene gas (C2H2) is heated with oxygen in the atmosphere, an explosive reaction causes carbon dioxide and water vapor to be formed.
4. When zinc is exposed to a strong solution of sulfuric acid (H2SO4), a zinc sulfate (ZnSO4) solution and hydrogen gas (H2) are formed in a reaction that generates enough heat to burn one’s hand.