**Writing the Complete Equation**

*Write the complete chemical equation for each of the following chemical*

*reactions:*

1) When iron solid is placed in liquid lithium sulfate and electricity is added to

it, iron (II) sulfate crystals and solid lithium metal are formed.

2) When the ethanol (C2H6O) in some gasoline burns with oxygen gas in an

automobile engine, it forms carbon dioxide gas and water vapor.

3) When the pressure on an aqueous solution of carbonic acid is decreased

to 0.1 atmospheres, it decomposes to form carbon dioxide gas and water.

4) When iodine gas reacts with methane gas at very high temperatures, CH3I

gas and hydrogen iodide gas are formed.

5) When dinitrogen hexaiodide crystals are hit with a hammer, they

spontaneously and explosively decompose to form nitrogen gas and

iodine powder.

6) When hydrochloric acid gas reacts with gaseous ammonia, water vapor

and solid ammonium chloride are formed.