**Oxidation and Reduction Practice**

In each of the following equations, indicate the element that has been oxidized and the one that has been reduced. You should also label the oxidation state of each before and after the process:

1) 2 Na + FeCl2 🡪 2 NaCl + Fe

2) 2 C2H2 + 5 O2 🡪 4 CO2 + 2 H2O

3) 2 PbS + 3 O2 🡪 2 SO2 + 2 PbO

4) 2 H2 + O2 🡪 2 H2O

5) Cu + HNO3 🡪 CuNO3 + H2

6) AgNO3 + Cu 🡪 CuNO3 + Ag

Balance the following redox reactions

1. SO2 (g) + HNO2 (aq) → H2SO4 (aq) + NO (g)
2. Al (s) + H2SO4 (aq) → Al2(SO4)3 (aq) + H2 (g)
3. Au3+ (aq) + I- (aq) → Au (s) + I2 (s)
4. S2- (aq) + I2 (s) → SO42- (aq) + I- (aq)
5. H2O2 (aq) + ClO4- (aq) → O2 (g) + ClO2- (aq)
6. Br2 (aq) + OH- (aq) → Br- (aq) + BrO3- (aq)
7. Mn (s) + HNO3 (aq) → Mn2+ (aq) + NO2 (g)