CHEMISTRY
QUIZ: Balancing Equations (B)

Name _____
Period _____ Date _____

**Balance the equations for the following reactions by writing the appropriate coefficient in front of each compound formula. Use the back or scratch paper to work them out if necessary.**

1. ____ $CaCl_{2\,(aq)}$ + ____ $AgNO_{3\,(aq)}$ → ____ $Ca(NO_3)_{2\,(aq)}$ + ____ $AgCl_{\,(s)}$

2. ____ $Ti_{\,(s)}$ + ____ $N_{2\,(g)}$ → ____ $Ti_3N_{4\,(s)}$

3. ____ $C_3H_{8\,(g)}$ + ____ $O_{2\,(g)}$ → ____ $CO_{2\,(g)}$ + ____ $H_2O_{\,(g)}$

**Identify how many oxygen atoms are in each compound set represented below**

4. _____ 5 $Al_2O_3$

5. _____ 3 $Ca(NO_3)_2$

6. _____ 2 $CO_2$ + 4 $H_2O$

7. _____ PbO + 2 $CaSO_4$

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**Balance these equations by filling the blanks with the proper coefficients:**

1. ____ $Zn(s)$ + ____ $CuSO_4(aq)$ → ____ $ZnSO_4(aq)$ + ____ $Cu(s)$

2. ____ $H_2O_2(l)$ → ____ $H_2O(l)$ + ____ $O_2(g)$

3. ____ $C_2H_2(g)$ + ____ $O_2(g)$ → ____ $CO_2(g)$ + ____ $H_2O(g)$

4. **Explain what these terms represent that are found in the previous equations:**

   a. $O_2(g)$

   b. $Zn(s)$

   c. $H_2O(l)$

   d. $CuSO_4(aq)$

5. **Write the complete balanced equation for the following word equation:**

**Barium and water yield barium hydroxide and hydrogen gas.**