Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 4R – Writing Combination Reactions with Balancing (Part 1) 20 Points

For the following reactions, write the products of each reaction following the template provided. Balance each reaction. Show work for ionic compound

Reaction	_____ Mn^{3+} + _____ O_2 → _____
General Form	A + B → AB

Formula	A	B
Ion Charge		
Cross Method		
AB		

Reactants		Products	
Mn		Mn	
O		O	

Reaction	_____ Zn^{1+} + _____ N_2 → _____
General Form	A + B → AB

Formula	A	B
Ion Charge		
Cross Method		
AB		

Reactants		Products	
Zn		Zn	
N		N	

Reaction	_____ Rb^{2+} + _____ $PbCl_4$ → _____ + _____
General Form	A + BC → AC + B

Formula	A	C
Ion Charge		
Cross Method		
AC		

Reactants		Products	
Rb		Rb	
Pb		Pb	
Cl		Cl	

Reaction	_____ Sn^{4+} + _____ V_2S_3 → _____ + _____
General Form	A + BC → AC + B

Formula	A	C
Ion Charge		
Cross Method		
AC		

Reactants		Products	
Sn		Sn	
V		V	
S		S	

Reaction	_____ $CaBr_2$ + _____ Mn_2O_3 → _____ + _____ Mn = +3
General Form	AB + CD → AD + CB

Formula	A	D	C	B
Ion Charge				
Cross Method				
AD CB				

Reactants		Products	
Ca		Ca	
Br		Br	
Mn		Mn	
O		O	

Reaction	_____ Ni_2O_3 + _____ Ag_3P → _____ + _____ Ni = +3 Ag = +1
General Form	AB + CD → AD + CB

Formula	A	D	C	B
Ion Charge				
Cross Method				
AD CB				

Reactants		Products	
Ni		Ni	
O		O	
Ag		Ag	
P		P	