Final Exam Review Part 4 Name:

Predict the products for the following equations and balance. If no reaction occurs then write N. R.

1) PCl3 🡪

2) Ca + AlPO4 🡪

3) C4H10 + O2 🡪

4) Cu + MgCO3  🡪 (Cu is a 2+ in this reaction)

5) Br2 + B 🡪

6) Mg(ClO3)2 🡪

7) CaCl2 + Ba(OH)2 🡪

8) FeS + HCl 🡪

9) Zn + FeSO4 🡪 (Zn is a +2 in this reaction)

10) Ba(OH)2 + (NH4)2SO3 🡪

11) SrCO3 🡪

12) Br + FeI3 🡪

13) Ba + O2 🡪

14) 85.0 g Ca = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ atoms Ca

15) 17 mol S = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g S

16) 2.07 x 1028 atoms N = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g N

17) 35.0 g MgSO4 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mol MgSO4

18) 4005 molecules H2O = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g H2O

19) 5 mol Al = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g Al

20) 5.9 x 1055 atoms I = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mol I

21) 120.0 grams NaCl = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ formula units

22) 650 g KMnO4 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mol KMnO4

23) 0.475 mole Ca(NO3)2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ g