

## Final Exam Review Part 4

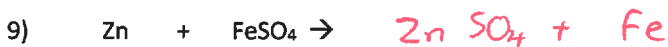
Name:

Key

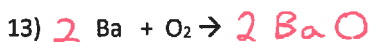
Predict the products for the following equations and balance. If no reaction occurs then write N. R.



(Cu is a 2+ in this reaction)



(Zn is a +2 in this reaction)



14)  $85.0 \text{ g Ca} = \underline{1.28 \times 10^{24}}$  atoms Ca

15)  $17 \text{ mol S} = \underline{544}$  g S

16)  $2.07 \times 10^{28} \text{ atoms N} = \underline{481,395}$  g N

17)  $35.0 \text{ g MgSO}_4 = \underline{0.292}$  mol  $\text{MgSO}_4$

18)  $4005 \text{ molecules H}_2\text{O} = \underline{1.2 \times 10^{-19}}$  g  $\text{H}_2\text{O}$

19)  $5 \text{ mol Al} = \underline{135}$  g Al

20)  $5.9 \times 10^{55} \text{ atoms I} = \underline{9.8 \times 10^{31}}$  mol I

21)  $120.0 \text{ grams NaCl} = \underline{1.25 \times 10^{24}}$  formula units

22)  $650 \text{ g KMnO}_4 = \underline{4.11}$  mol  $\text{KMnO}_4$

23)  $0.475 \text{ mole Ca}(\text{NO}_3)_2 = \underline{77.9}$  g