

Chem E-1a
Friday Review Answers
Chapter 3

1. $\text{Mg}_3\text{P}_2\text{O}_8$
2. empirical formula: $\text{C}_4\text{H}_8\text{O}$
molecular formula: $\text{C}_8\text{H}_{16}\text{O}_2$
3. a) $\text{N}_2\text{O}_5 (s) + \text{H}_2\text{O} (l) \rightarrow 2 \text{HNO}_3 (aq)$
b) 6.69 g HNO_3
4. a) $\text{Cr}_2\text{O}_3 + 2 \text{CCl}_4 \rightarrow 2 \text{CrCl}_3 + \text{CO}_2 + \text{COCl}_2$
b) 163.4 g CrCl_3
c) 0 g CCl_4 remain and 21.6 g Cr_2O_3 remain
5. 7.34 g $\text{C}_2\text{H}_6\text{O}$ and 2.66 g H_2O