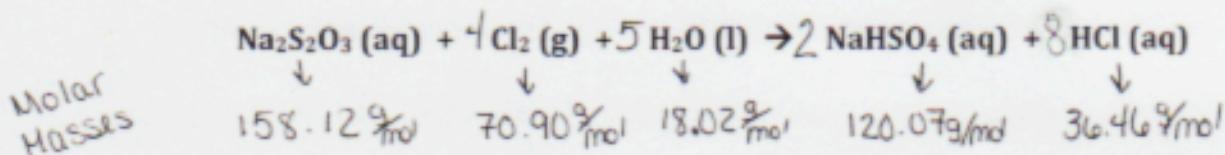


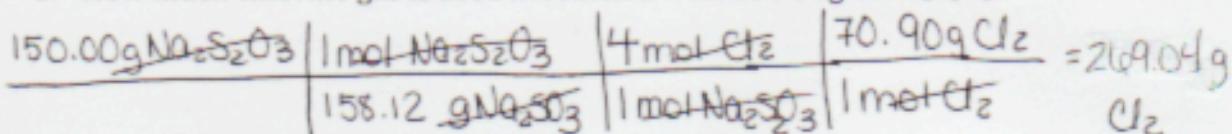
Stoichiometry Review
Honors Chemistry & Chemistry

1. The following reaction occurs when you bleach clothes:

a. Balance the reaction:

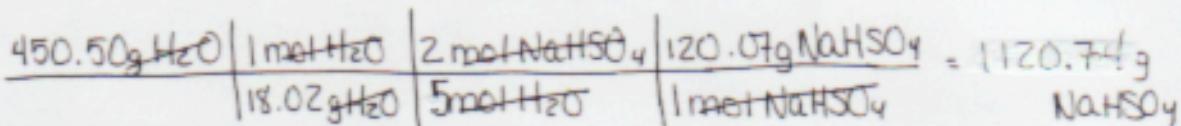
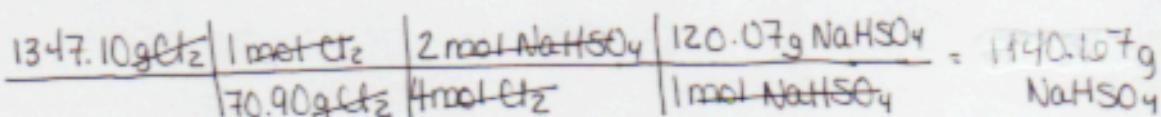
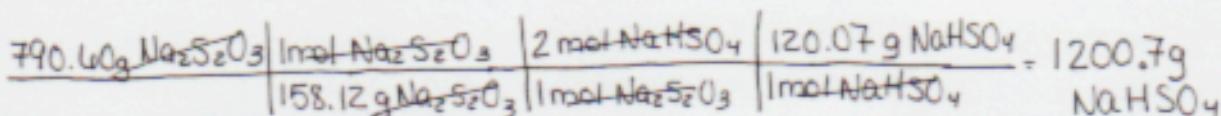


- b. How much chlorine gas is used in reaction with 150.00g of $\text{Na}_2\text{S}_2\text{O}_3$?



- c. If 790.60g of $\text{Na}_2\text{S}_2\text{O}_3$, 1347.10g of Cl_2 , and 450.50g of H_2O react, calculate the following:

i. The limiting reactant.



Limiting Reactant = H_2O

ii. The theoretical yield of NaHSO_4 .

$$1120.74 \text{ g NaHSO}_4$$

iii. The % yield of NaHSO_4 if only 1000.00g is actually produced.

$$\% \text{ yield} = \frac{\text{actual yield}}{\text{theoretical yield}} \times 100 =$$

$$\% \text{ yield} = \frac{1000.00 \text{ g}}{1120.74 \text{ g}} \times 100 = 89.227 \%$$

Honors
only