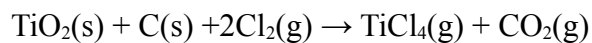


**CHM 110**  
**Stoichiometry Set**

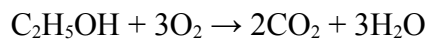
**Solve the following problems Write the answer in the answer blank, and show work in the space provided.**

1) What mass of  $\text{TiO}_2$  would (given enough carbon and chlorine) be required to produce 45.0 g of  $\text{TiCl}_4$  in the following reaction?



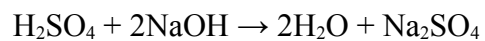
Answer: \_\_\_\_\_ g  $\text{TiO}_2$

2)  $\text{C}_2\text{H}_5\text{OH}$  burns in air to form  $\text{CO}_2$  and  $\text{H}_2\text{O}$ . What mass of water can be produced when 75.0 grams of  $\text{C}_2\text{H}_5\text{OH}$  burns in sufficient oxygen?



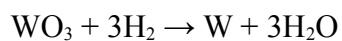
Answer: \_\_\_\_\_ g  $\text{H}_2\text{O}$

3) How many mL of 6.00 M  $\text{H}_2\text{SO}_4$  is needed to react with 50.0 mL of 2.00 M NaOH?



Answer: \_\_\_\_\_ mL 6.00 M  $\text{H}_2\text{SO}_4$

4) What is the maximum mass of tungsten (W) that could be produced by reacting 150.0 g of  $\text{WO}_3$  with 50. g of  $\text{H}_2$  in the following reaction?



Answer: \_\_\_\_\_ g W