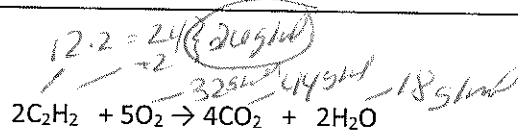


PQ Mass to Mass Ratios



1. Calculate the molar mass of each substance and place that value above the substance in the reaction above.

2. If you were given 50g of Acetylene and burned it in excess oxygen, how much mass of water can you get?

(Use factor label) $g \rightarrow \text{mol} \rightarrow \text{mol} \rightarrow g$

$$\frac{50g}{24g} \times \frac{1 \text{ mol}}{2} \times \frac{2 \text{ mol}}{1} \times \frac{18g}{1 \text{ mol}} = 37.5g$$

3. If you burned acetylene and got 70g of CO₂, how much C₂H₂ did you burn?
grams

$g \xrightarrow[\text{CO}_2]{\text{CO}_2} \text{moles} \rightarrow \text{mol} \rightarrow g \text{ C}_2\text{H}_2$
 $\text{CO}_2 \quad \text{C}_2\text{H}_2$

$$\frac{70g \text{ CO}_2}{44g} \times \frac{1 \text{ mol}}{4} \times \frac{2 \text{ mol}}{1} \times \frac{26g}{1 \text{ mol}} = 20.68g$$