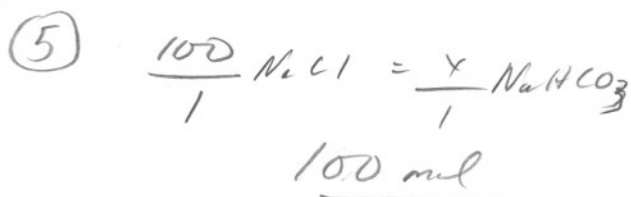
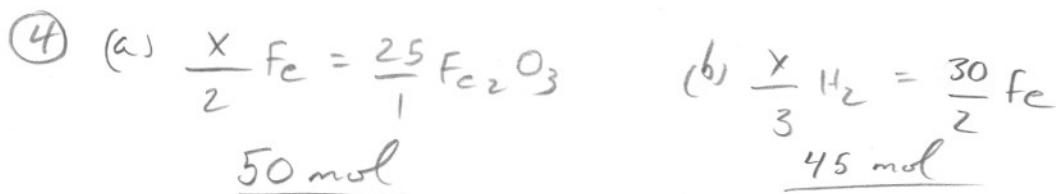
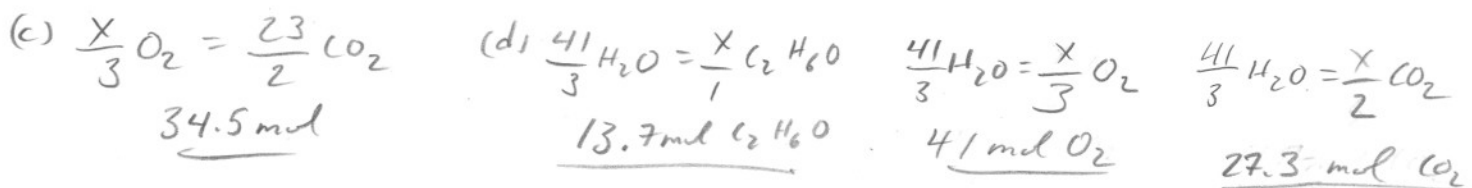
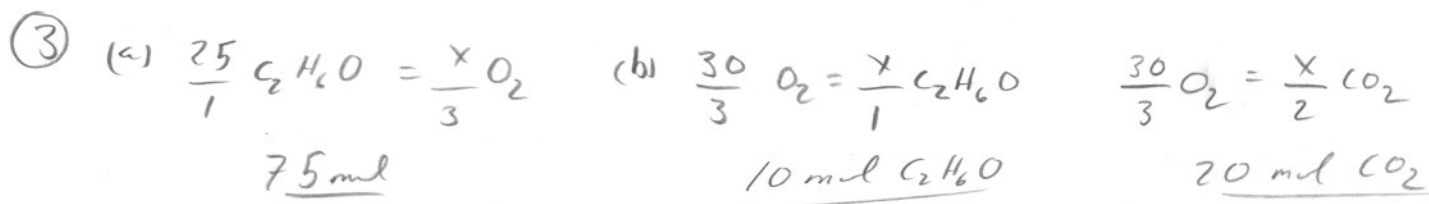
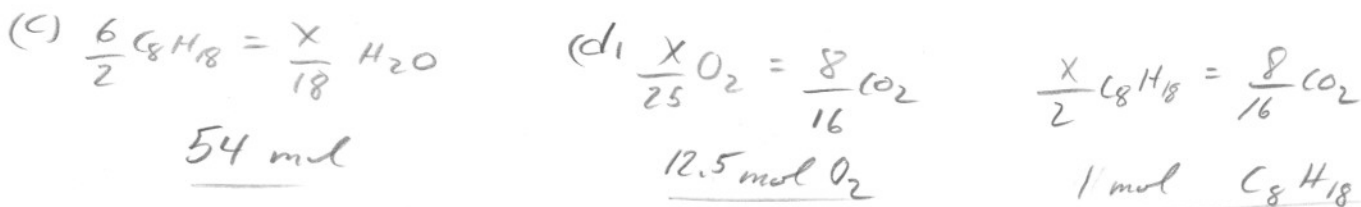
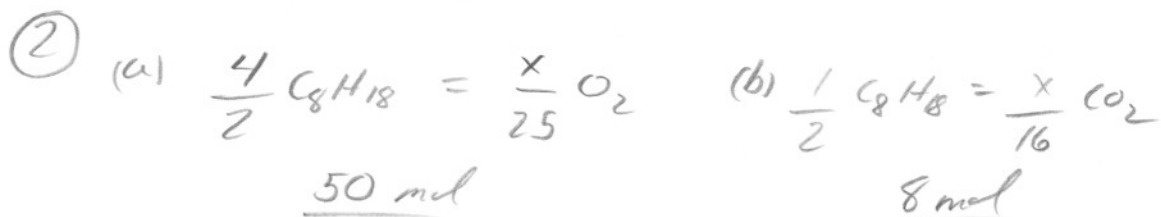


# Stoichiometry Worksheet 1



$$\frac{0.04}{0.02} = 2 \qquad \frac{0.02}{0.02} = 1$$



$$\textcircled{6} \quad \frac{18}{3} \text{CO} = \frac{x}{2} \text{Fe}$$

12 mol

$$\textcircled{7} \quad \frac{x}{4} \text{H}_2\text{O} = \frac{6}{3} \text{O}_2$$

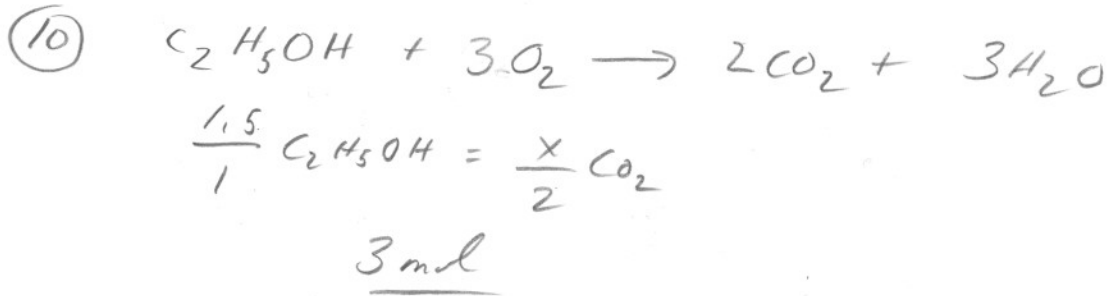
8 mol

$$\textcircled{8} \text{ (a) } \frac{x}{2} \text{FeCl}_3 = \frac{24}{3} \text{Cl}_2 \quad \text{(b) } \frac{24 \text{Cl}_2}{3} = \frac{x}{2} \text{Fe} \quad \text{(c) } \frac{.5 \text{Fe}}{2} = \frac{x}{3} \text{Cl}_2 \quad \frac{.5 \text{Fe}}{2} = \frac{x}{2} \text{FeCl}_3$$

16 mol                      16 mol                      0.75 mol Cl<sub>2</sub>                      .5 mol FeCl<sub>3</sub>

$$\textcircled{9} \quad \frac{x}{8} \text{HNO}_3 = \frac{2.56}{3} \text{Cu}$$

6.83 mol Cu



$$\textcircled{11} \text{ (a) } \frac{x}{2} \text{NO} = \frac{4}{3} \text{Cu} \quad \text{(b) } \frac{x}{8} \text{HNO}_3 = \frac{5}{3} \text{Cu} \quad \text{(c) } 1 \text{ mol Cu} = 63.5 \text{ g}$$

2.7 mol                      13.3 mol                       $\begin{matrix} \times & 6.35 \text{ g} \\ & 6.35 \text{ g} \\ \hline & x = .1 \text{ mol} \end{matrix}$

$$\frac{x}{2} \text{NO} = \frac{.1}{3} \text{Cu}$$

0.067 mol

$$\textcircled{12} \text{ (a) } \frac{1}{1} \text{N}_2 = \frac{x}{2} \text{NH}_3$$

2 mol

$$\text{(b) } 1 \text{ mol} = 6.02 \times 10^{23}$$

$\times \quad 18 \times 10^{23}$   
3 mol

$$\frac{3}{3} \text{H}_2 = \frac{x}{2} \text{NH}_3$$

2 mol

$$\text{(c) } \frac{.3}{3} \text{H}_2 = \frac{x}{2} \text{NH}_3$$

.2 mol