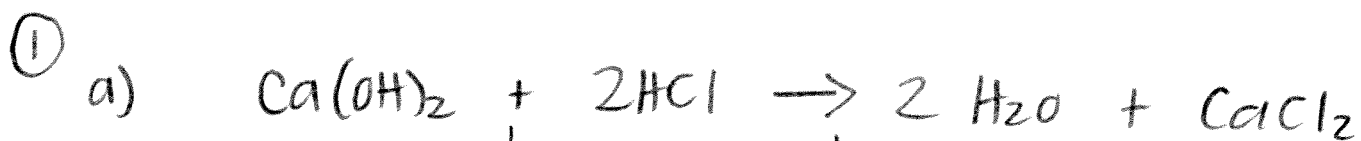


Stoichiometry Practice Problems



B			
C	$-6.4 \left(\frac{1}{2}\right) = 3.2$	-6.4	
A			

3.2 mol Ca(OH)_2 react



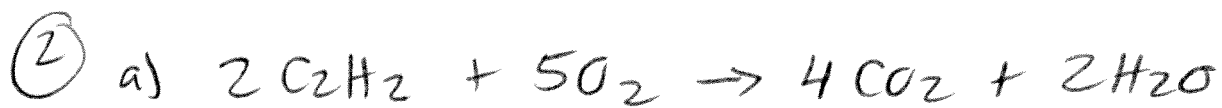
B			
C		$-3.5 \left(\frac{2}{1}\right) = 3.5$	$+3.5 \text{ mol}$
A			

3.5 mol HCl react



B			
C	$-12 \left(\frac{1}{2}\right) = 6$		$+12 \text{ mol}$
A			

6.0 mol Ca(OH)_2 react



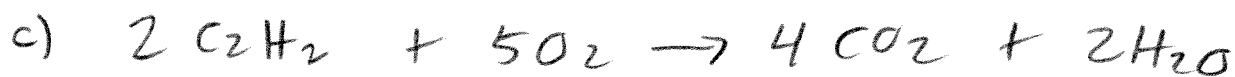
B		
C	$-8.2 \left(\frac{5}{2}\right) = 20.5$	+ 8.2 mol
A		

21 mol O_2 react



B		
C	- 10.5	+ $10.5 \left(\frac{2}{5}\right) = 4.2$
A		

4.20 mol H_2O produced



B		
C	$-3.6 \left(\frac{2}{2}\right) = 3.6$	+ 3.6 mol
A		

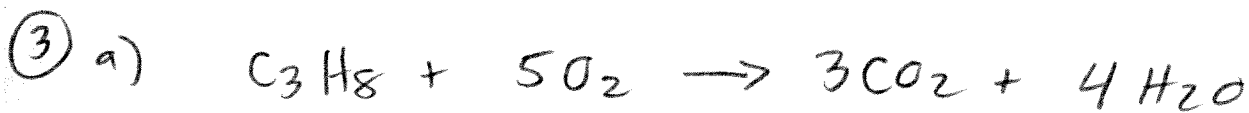
3.6 mol C_2H_6 react



B		
C	-7.4 mol	+7.4 $\left(\frac{4}{2}\right) = 14.8$
A		

14.8 mol CO_2 produced

↳
$$\frac{14.8 \text{ mol CO}_2}{1 \text{ mol CO}_2} \times 6.02 \times 10^{23} \text{ molecules CO}_2 = 8.9 \times 10^{24} \text{ molecules CO}_2$$



B		
C	-12 $\left(\frac{1}{3}\right) = 4$	+12 mol
A		

4 mol C_3H_8 reacted



B			
C	-2.33 mol		+2.33($\frac{3}{1}$)=6.99
A			

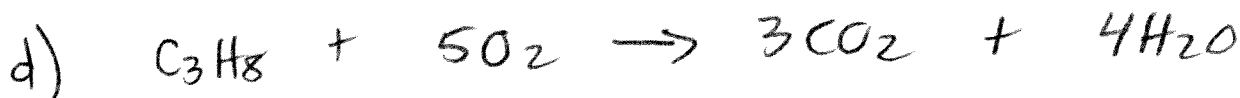
6.99 mol CO_2 produced

$$\hookrightarrow \frac{6.99 \text{ mol } CO_2 \mid 44.01 \text{ g } CO_2}{1 \text{ mol } CO_2} = \boxed{308 \text{ g } CO_2}$$



B			
C	-3.01 mol		-3.01($\frac{5}{1}$)=15.05
A			

$\boxed{15.1 \text{ mol } O_2 \text{ react}}$



B			
C	-4.2 mol		+4.2($\frac{3}{1}$)=12.6
A			

12.6 mol CO_2 produced

$$\hookrightarrow \frac{12.6 \text{ mol } CO_2 \mid 22.4 \text{ L } CO_2}{1 \text{ mol } CO_2} = 282 = \boxed{280 \text{ L } CO_2}$$

2 Sig Figs



B			
C	- 3.55 mol	$-3.55(\frac{1}{2}) = 1.775$	
A			

1.78 mol MgBr_2 react



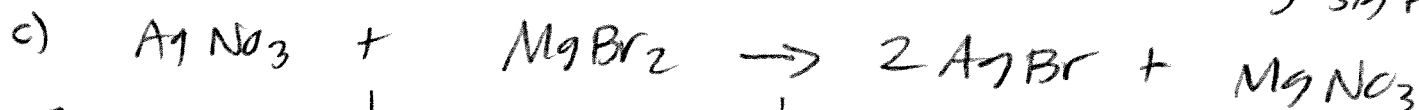
B			
C	- 3.13 mol	$+ 3.13(\frac{2}{1}) = 6.26$	
A			

6.26 mol AgBr produced

$$\hookrightarrow \frac{6.26 \text{ mol AgBr} \mid 187.77 \text{ g AgBr}}{1 \text{ mol AgBr}} = 1175 \text{ g AgBr}$$

= 1180 g AgBr

3 sig figs



B			
C	$-1.98(\frac{1}{2}) = 0.99$	$+ 1.98 \text{ mol}$	
A			

0.99 mol MgBr_2 react

$$\hookrightarrow \frac{0.99 \text{ mol MgBr}_2 \mid 184.11 \text{ g MgBr}_2}{1 \text{ mol MgBr}_2} = 182 \text{ g MgBr}_2$$