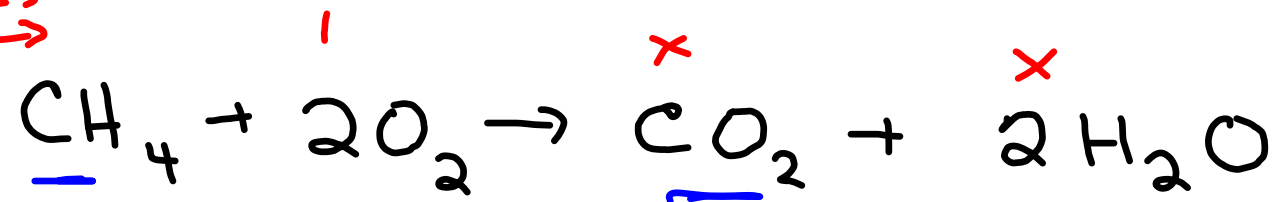


Stoichiometry

moles
→

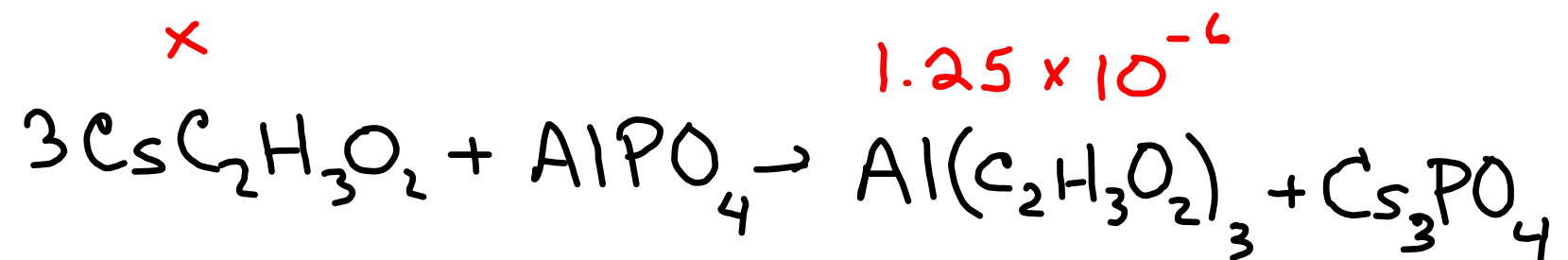


→
grams

$$\frac{1}{2} = \frac{x}{2} \quad 2 = 2(x) \quad x = 1 \text{ mol H}_2\text{O}$$

$$\frac{1}{2} = \frac{x}{1} \quad 1 = 2x \quad x = .5 \text{ mol CO}_2$$

22.

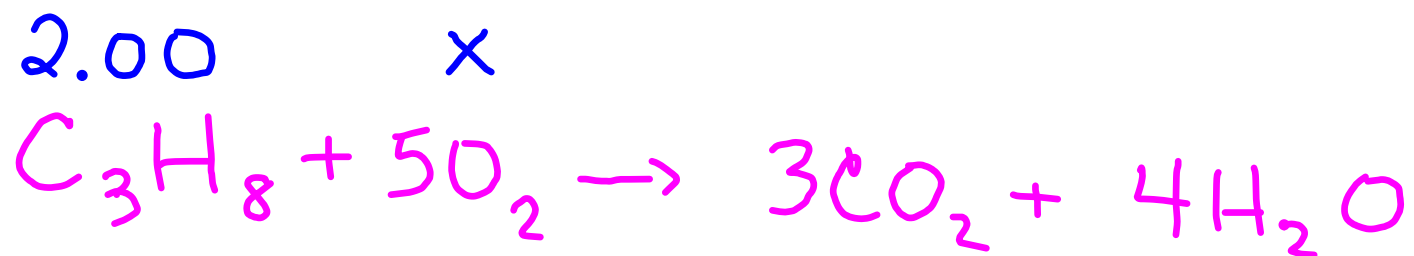


$$\frac{x}{3} = \frac{1.25 \times 10^{-6}}{1}$$

$$\begin{aligned} (x) &= 3(1.25 \times 10^{-6}) \\ &= 3.75 \times 10^{-6} \text{ mol} \end{aligned}$$

Final Exam F

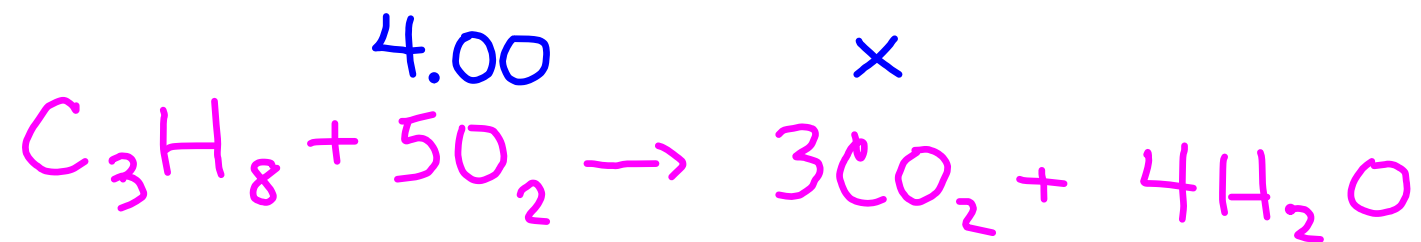
Fri 5/8 1:30-4



$$\frac{2}{1} = \frac{x}{5}$$

$$x = 10 \text{ moles of } \text{O}_2$$

$$10.0 \text{ moles}$$

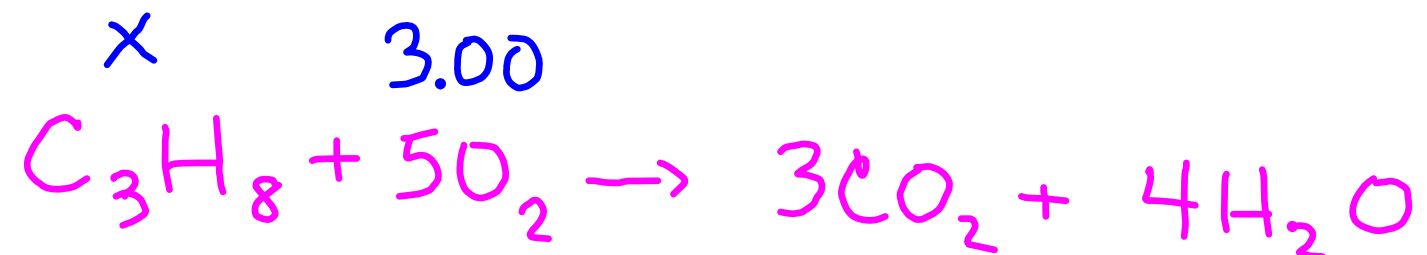


$$\frac{4}{5} = \frac{x}{3}$$

$$\frac{12}{5} = \frac{x(5)}{5}$$

$$x = 2.4 \text{ mol of } CO_2$$

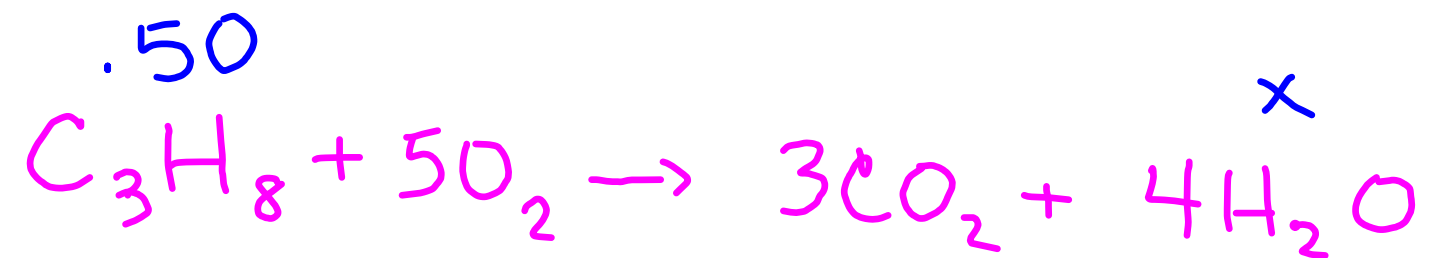
2.40 mol



$$\frac{x}{1} = \frac{3}{5}$$

$$\frac{3}{5} = \frac{x(5)}{5}$$

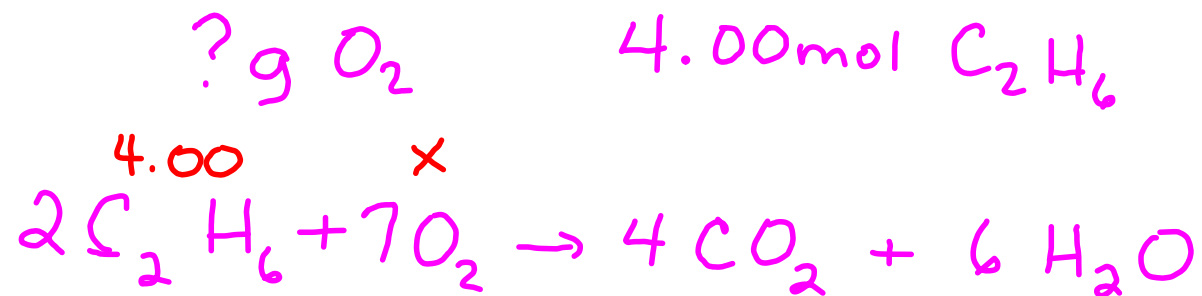
$$x = .600 \text{ mol of } C_3H_8$$



$$\frac{.5}{1} = \frac{x}{4}$$

$$.5(4) = x$$

$$x = 2.0 \text{ moles } H_2O$$



mole $\rightarrow$ mole

$$\frac{4}{2} = \frac{x}{7}$$

$$(4)(7) = x(2)$$

$$28 = x(2)$$

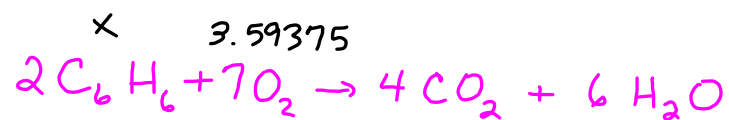
$$x = 14.0 \text{ mol O}_2$$

mol $\rightarrow$ g

$$\begin{array}{c}
 14.0 \text{ mol} \times 32 \text{ g} \\
 \hline
 1 \text{ mol}
 \end{array} = 448 \text{ g of O}_2$$

$0.16 \times 2 = 32 \text{ g} = 1 \text{ mol}$

?g C₂H₆ 115g O₂



g → mol

O 16 x 2 = 32g = 1mol

$$\frac{115\text{g} \times 1\text{mol}}{32\text{g}} = 3.59375\text{mol O}_2$$

mol → mol

$$\frac{x}{2} = \frac{3.59375}{7}$$

$$7(x) = 2(3.59375)$$

$$7(x) = 7.1875$$

$$x = 1.026785\text{mol C}_2\text{H}_6$$

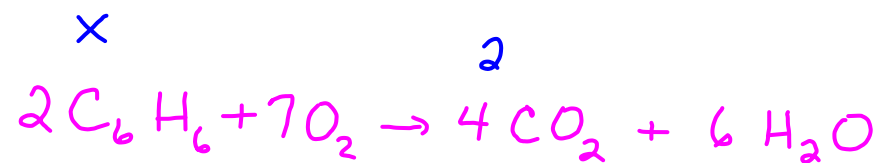
mol → g

$$\text{C } 12 \times 2 = 24$$

$$\text{H } 1 \times 6 = \frac{6}{30\text{g} = 1\text{mol}}$$

$$\frac{1.026785\text{mol} \times 30\text{g}}{1\text{mol}} = 30.8\text{g of C}_2\text{H}_6$$

?g C₂H₆ 88g CO₂



g → mol

C 12 × 1 = 12

O 16 × 2 = 32
44g = 1mol

$$\frac{88\text{g} \times 1\text{mol}}{44\text{g}} = 2\text{mol CO}_2$$

mol → mol

$$\frac{x}{2} = \frac{2}{4}$$

$$4x = 4$$

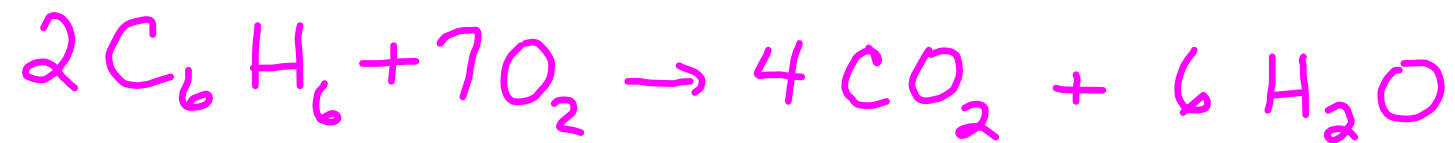
$$x = 1\text{mol C}_2\text{H}_6$$

mol → g

C₂H₆ 30g = 1mol

$$\frac{1\text{mol} \times 30\text{g}}{1\text{mol}} = 30\text{g C}_2\text{H}_6$$

? g H_2O 82.5 g O_2



ex.

? mol

3.67 mol

mol $\rightarrow$ mol

? g

3.67 mol

mol $\rightarrow$ mol

mol $\rightarrow$ g

? g

172 g

g $\rightarrow$ mol

mol $\rightarrow$ mol

mol $\rightarrow$ g