Name:
Stoichiometry

1.   ___ Fe + ___ O_2 → ___ Fe_2O_3

a) How many **moles** of iron would be needed to react with 3.82 **moles** of oxygen?

$$\frac{}{} = \text{mol Fe}$$

b) What **mass** of iron (III) oxide can be produced from 1.35 **moles** Fe?

$$\frac{}{} = \text{g } Fe_2O_3$$

c) How many **moles** of O_2 are needed to produce 347 **g** of Fe_2O_3?

$$\frac{}{} = \text{mol } O_2$$

d) What **mass** of iron (III) oxide can be produced from 135 **g** Fe?

$$\frac{}{} = \text{g } Fe_2O_3$$

2.   ___ C_4H_{10} + ___ O_2 ---> ___ CO_2 + ___ H_2O
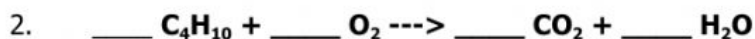
a) When 6.24 **moles** of O_2 are reacted, how many **moles** of carbon dioxide are produced?

$$\frac{}{} = \text{mol } CO_2$$

b) How many **grams** of C_4H_{10} would produce 88 **grams** of water?

$$\frac{}{} = \text{g } C_4H_{10}$$

6.24 mol O_2	88 g H_2O
10 H_2O	58.14 g
13 O_2	44.01 g
2 C_4H_{10}	32.00 g
8 CO_2	18.02 g
1 mole	6.022E23
1 mole	