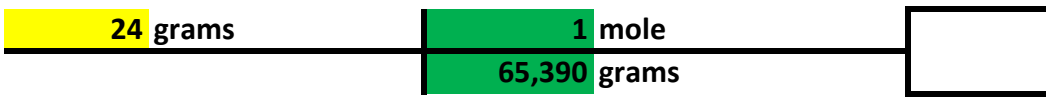
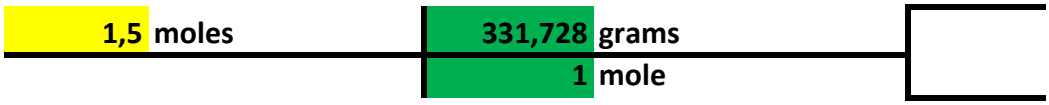
Grams to Moles

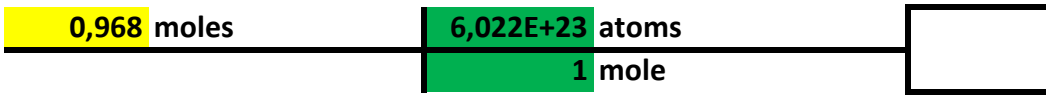


Moles to Grams



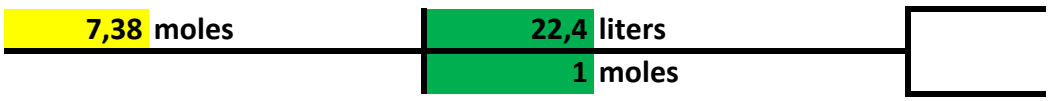
Atoms to Moles

Moles to Atoms



Liters to Moles

Moles to Liters



H	1,008
C	12,011
N	14,007
O	15,999
Na	22,990
Cl	35,453
Fe	55,847
Au	196,967
B	10,810
Mg	24,305
S	32,060
P	30,974
Ag	107,868
Cr	51,996
Zn	65,390

0,367028598

497,592

0,0273995

5,8293E+23

1,662946429

165,312

Mass to Volume

45038	grams	1	mole	22,4	liters
		32	grams	1	mole

Volume to Mass

5	liters	1	mole	2,016	grams
		22,4	liters	1	mole

Mass to Atoms

2,5	grams	1	mole	6,022E+23	atoms
		16,043	grams	1	mole

Atoms to Mass

1,00E+24	atoms	1	mole	117,169	grams
		6,022E+23	atoms	1	mole

Liters to Atoms

2,5	liters	1	mole	6,022E+23	atoms
		22,4	liters	1	mole

Atoms to Liters

2,06E+25	atoms	1	mole	22,4	liters
		6,022E+23	atoms	1	mole

——— **31526,6**

——— **0,450**

——— **9,38416E+22**

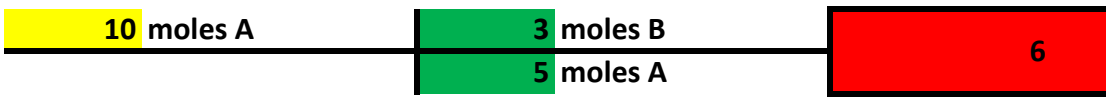
——— **194,568**

——— **6,72098E+22**

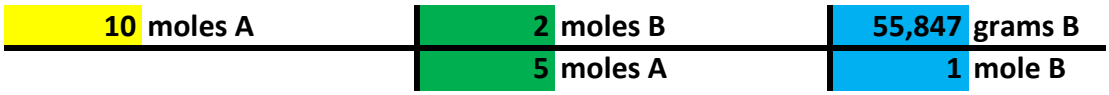
——— **767,373**

H	1,008
C	12,011
N	14,007
O	15,999
Na	22,990
Cl	35,453
Fe	55,847
Au	196,967
B	10,810

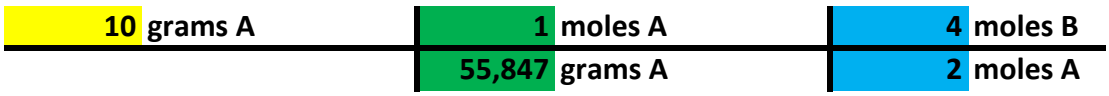
Moles A to Moles B



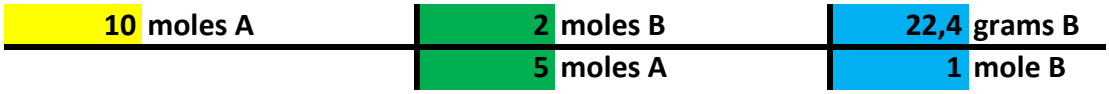
Moles A to Grams B



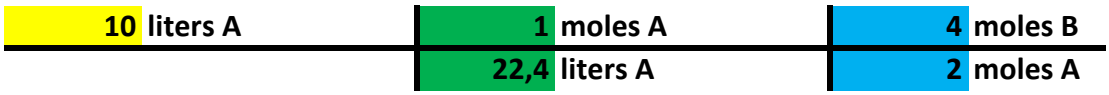
Grams A to Moles B



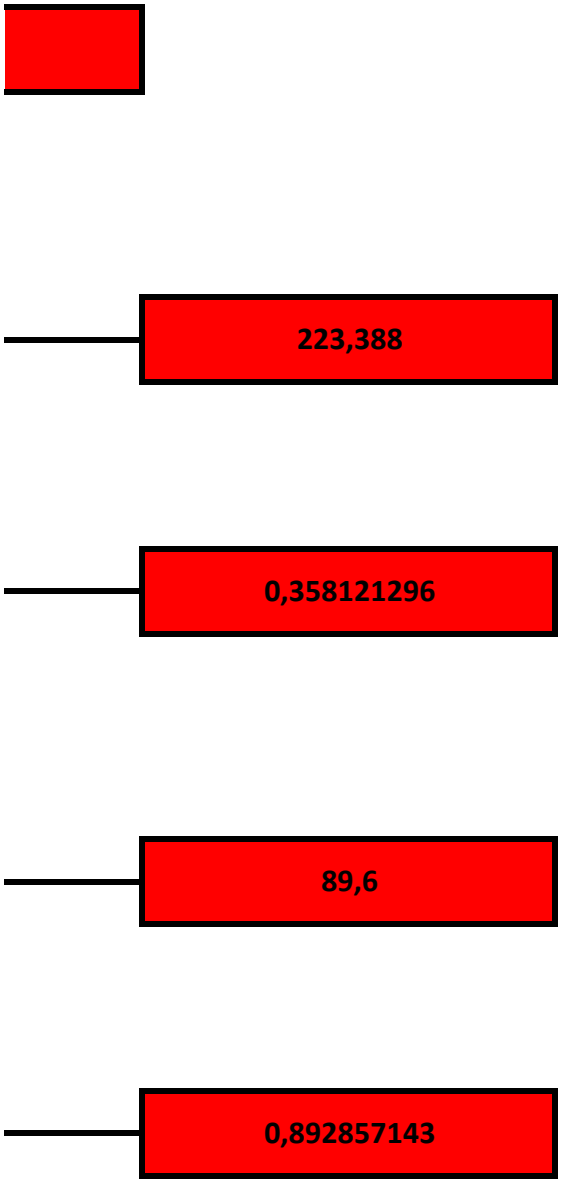
Moles A to Liters B



Liters A to Moles B



H	1,008
C	12,011
N	14,007
O	15,999
Na	22,990
Cl	35,453
Fe	55,847
Au	196,967
B	10,810
Mg	24,305
S	32,060
P	30,974
Ag	107,868
Cr	51,996
Zn	65,390



Fe2O3

$$2\ H_2\ (g) + O_2\ (g) \rightarrow 2\ H_2O\ (l)$$

Reactant A

5 grams A	1 moles A	2 moles C
	2,016 grams A	2 moles A

Reactant B

5 grams B	1 moles B	2 moles C
	32 grams B	1 moles B

Limiting Reactant to Excess Reactant

5 grams Limiting	1 moles Limiting	2 moles Exc
	32 grams Limiting	1 moles Lim

Theoretical Yield of Product

18 grams C		44,64285714
1 moles C		

Theoretical Yield of Product

18 grams C		5,625
1 moles C		

AMOUNT of OTHER REACTANT USED

2,016 grams Excess		0,63
1 moles Excess		

K	39,098
P	30,794
O	15,999
Al	26,982
C	12,011
H	1,008

REMAINING MASS =

STARTING MASS
MINUS AMOUNT USED

4,37

1 Gallon = 3217 grams Gasoline

87 midgrade

2798,79 Actual grams of octane

2 C8H18 (l) + 25 O2 (g

2798,79	**grams octane**	**1**	**moles octane**
		114,232	**grams octane**

b. The density of oxygen gas is 1.429 g/L. How many liters of CO2 will be produced

9800	grams O2	1	liter	1	mole O2	16
		1,429	grams	22,4	liters O2	25

;) 16 CO2 (g) + 18 H2O(g)

24,50093 moles of octante

16	**moles co2**	**22,4**	**liters co2**	**4390,566286**	
2	**moles octane**	**1**	**moles co2**		

12,4898

from 76.8 L O2 at STP?

mole CO2	22,4	Liters CO2		0
mole O2	1	mole CO2		