

Noteset 2C (Part 2)

Transition Metal Ionic Bonding w/ Reducing

Reducing with Cross Method

The "whole number ratio" includes at least one prime number. (Can only be \div by itself or 1)

Ex: AlCl_3 Al_2O_3

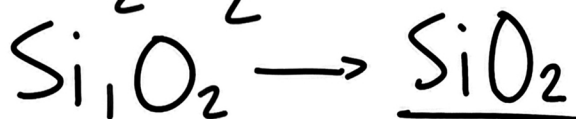
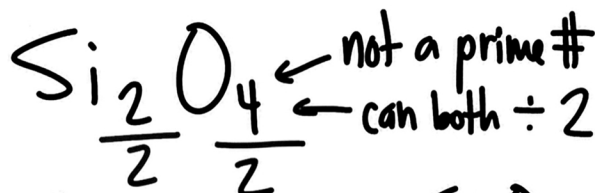
$\text{Al}=1$ $\text{Cl}=3$ $\text{Al}=2$ $\text{O}=3$

Prime Numbers 1, 2, 3, 5, 7, 11, 13, etc

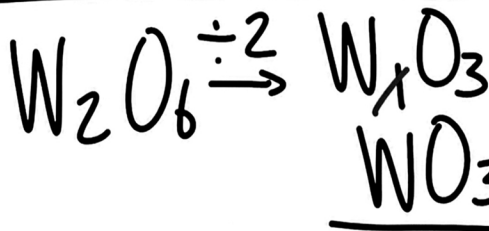
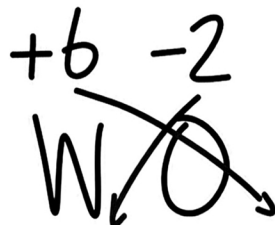
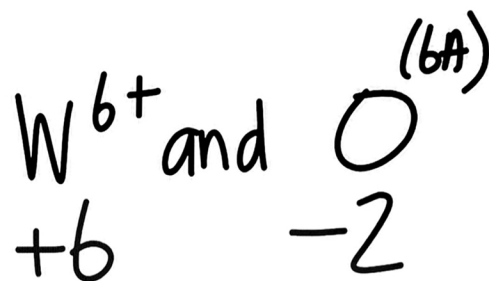
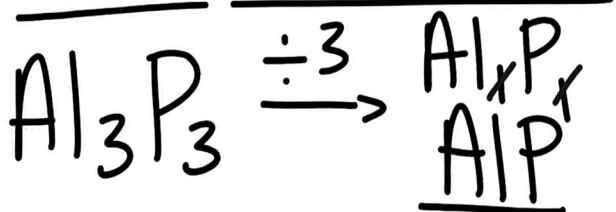
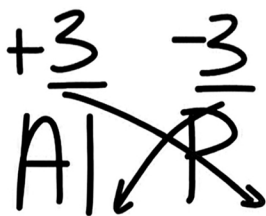
Non-Prime numbers can be reduced (like fractions)

$$\frac{2}{4} \xrightarrow[\div 2]{\div 2} \frac{1}{2}$$

Formulas can also be reduced



Doing the Cross Method



1A: +1
2A: +2
3A: +3
5A: -3
6A: -2
7A: -1
Trans: given (+)