

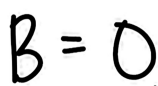
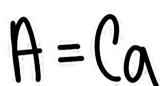
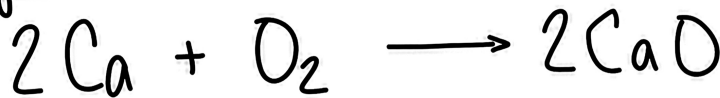
Combination and Decomposition Reactions

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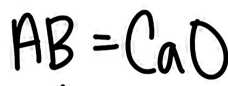
Combination (Synthesis) Reaction

Two single atoms combine to form a single compound or molecule

general form: $A + B \longrightarrow AB$



(not O_2)



(as one eqn)

A and B are
single elements

Na: $A = \text{Na}$

Cl_2 : $B = \text{Cl}$
(not Cl_2)

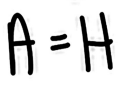
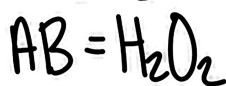
Combination and Decomposition Reactions

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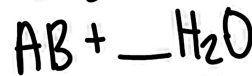
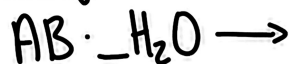
Decomposition Reactions

A single compound or molecule splits into two atoms
(Decomp can also be a dehydration of a hydrate.)

general form: $AB \longrightarrow A + B$



Dehydration



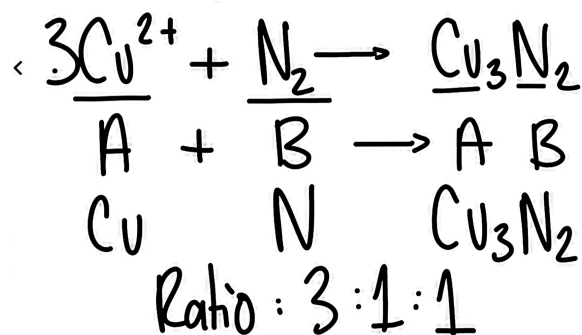
(Water removed ↗)

Combination and Decomposition Reactions

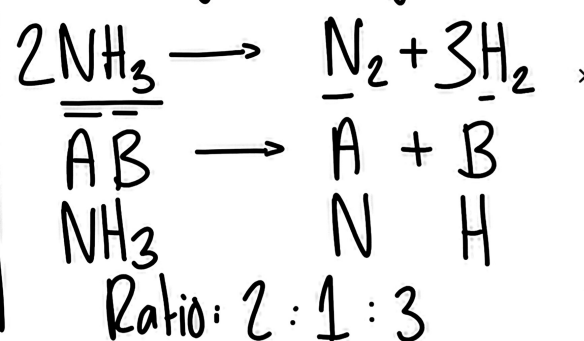
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Examples

Reaction Type: Combination



Reaction Type: Dehydration

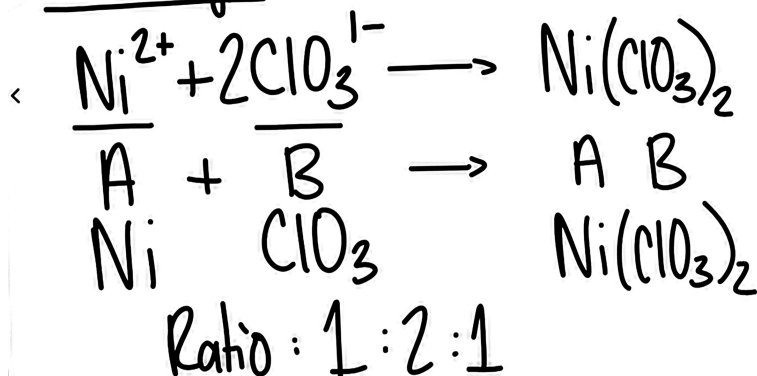


Combination and Decomposition Reactions

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Examples

Reaction Type: Combination



Dehydration : Removing Water (from hydrate)

remove water

