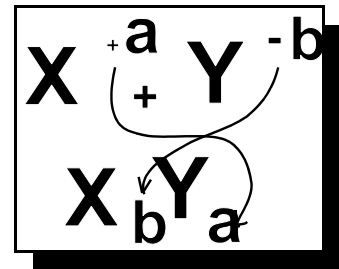


Writing Formulas by Crossing Over

The quickest way to determine the formula of a compound of two elements or polyatomic ions is to use the *Cross-Over Rule*. Look up the oxidation state of each element or ion and reduce to lowest terms. Then cross over the oxidation states without the sign to find the subscripts as shown in the diagram to the right.



Using the Cross-Over Rule, determine the formula for compounds of the elements and polyatomic ions below, and write your answer in the answer space.

- _____ 1. NH_4 and Cl
- _____ 2. Ba and Br
- _____ 3. Al and C
- _____ 4. Na and O
- _____ 5. K and PO_4
- _____ 6. Ca and F
- _____ 7. Li and N
- _____ 8. Ba and CO_3
- _____ 9. Al and SO_4
- _____ 10. Mg and NO_3
- _____ 11. Li and S
- _____ 12. Na and SO_4
- _____ 13. Ca and HCO_3
- _____ 14. Ag and CH_3COO
- _____ 15. Zn and OH