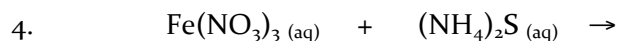
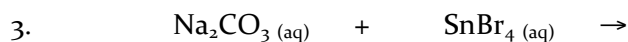
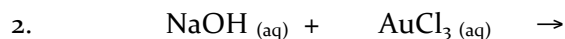
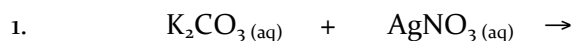


## Ionic Equations Practice

### Important points:

1. In order to predict the products of a double-displacement reaction (precipitation or acid-base or gas-forming), first write down the formulas and **charges** of the ions present in each reactant. Write down only one of each ion.
2. Next, switch the ions. Pay attention to their charges, and write the new formulas.
3. Check the solubility rules and write phase symbols for each product.
4. Balance the equation.
5. To write the total ionic equation, show each soluble ionic substance as separated ions. Strong acids are also shown as separated ions. Gases, liquids, solids, weak electrolytes, and nonelectrolytes are shown as is (not separated). Include phase symbols for anything that is not a separated ion.
6. Cancel out the spectator ions to get the net ionic equation.

For each of the following, write the molecular equation, the total ionic equation, and the net ionic equation.



Write the overall balanced equation for each of the following reactions:

