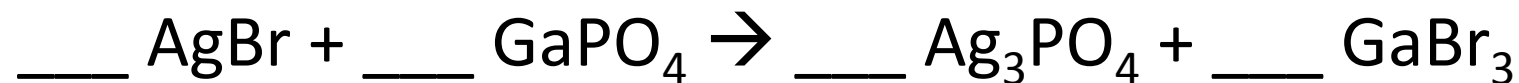


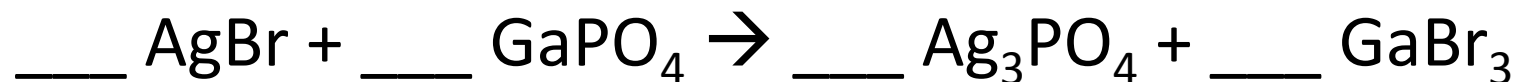
Balancing Chemical Equations

Balance the chemical reaction:



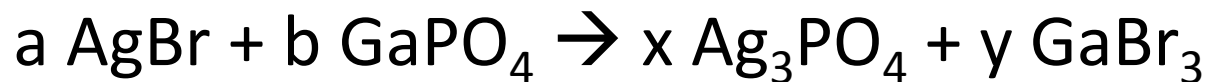
Balancing Chemical Equations

Balance the chemical reaction:



Solution:

Step 1. Write out coefficients



Step 2. Construct the atom equations:

$$\text{Ag: } a = 3x$$

$$\text{Br: } a = 3y$$

$$\text{Ga: } b = y$$

$$\text{P: } b = x$$

$$\text{O: } 4b = 4x$$

Balancing Chemical Equations

Step 3. Set an initial condition:

Ag: $a = 3x$, $a = 3$, then $x = 1$ and $y = 1$ (Ag and Br Eqn.)

Br: $a = 3y$

Ga: $b = y$ then $b = 1$

P: $b = x$

O: $4b = 4x$

Therefore, the balanced equation is:

