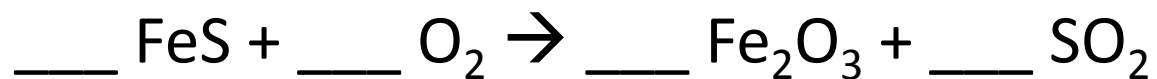


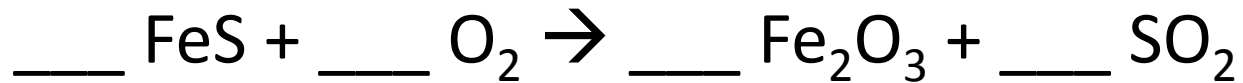
Balancing Chemical Equations

Balance the chemical reaction:



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Step 1. Write out coefficients



Step 2. Construct the atom equations:

$$\text{Fe: } a = 2x$$

$$\text{S: } a = y$$

$$\text{O: } 2b = 3x + 2y$$

Balancing Chemical Equations

Step 2. Make an initial guess and solve for coefficients:

Fe: $a = 2x$ Try $a = 2$, then $x = 1$ and $y = 1$

S: $a = y$

O: $2b = 3x + 2y$

Balancing Chemical Equations

Step 2. Make an initial guess and solve for coefficients:

Fe: $a = 2x$ Try $a = 2$, then $x = 1$ and $y = 2$

S: $a = y$

O: $2b = 3x + 2y$ Then $b = 7/2$. We could double them.

Write the balanced reaction:

