## Reaction Rates

The reaction rate for the following was $0.03 \mathrm{M} / \mathrm{s}$

$$
\mathrm{N}_{2} \mathrm{O}_{5} \rightarrow 2 \mathrm{NO}_{2}+1 / 2 \mathrm{O}_{2}
$$

What is the rate of change for each component?

## Rates for individual reactants

The reaction rate for the following was $0.03 \mathrm{M} / \mathrm{s}$

$$
\mathrm{N}_{2} \mathrm{O}_{5} \rightarrow 2 \mathrm{NO}_{2}+1 / 2 \mathrm{O}_{2}
$$

What is the rate of change for each component?

$$
\begin{aligned}
\mathrm{d}\left[\mathrm{~N}_{2} \mathrm{O}_{5}\right] / \mathrm{dt} & =-0.03 \mathrm{M} / \mathrm{s} \\
\mathrm{~d}\left[\mathrm{NO}_{2}\right] / \mathrm{dt} & =0.06 \mathrm{M} / \mathrm{s} \\
\mathrm{~d}\left[\mathrm{O}_{2}\right] / \mathrm{dt} & =0.015 \mathrm{M} / \mathrm{s}
\end{aligned}
$$

