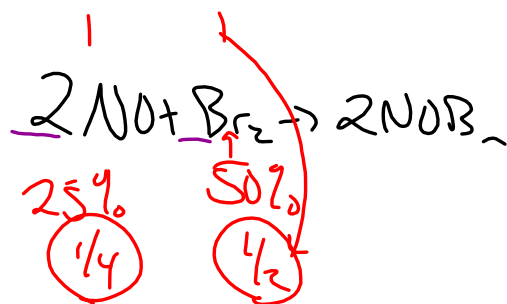


$$\textcircled{8} \text{ Rate} = k [\text{NO}]^2 [\text{Br}_2]$$

$$\frac{1}{2} \frac{d[\text{NO}]}{dt} = \frac{d[\text{Br}_2]}{dt}$$



Feb 6-8:07 AM

$$\textcircled{11} \quad \Delta \text{ conc} \quad \Delta \text{ rate}$$

$$1.5^{\boxed{\vee}} = 2.3$$

$$x \frac{\ln 1.5}{\ln 1.5} = \frac{\ln 2.3}{\ln 1.5}$$

Feb 6-8:21 AM

$$\textcircled{2} \quad \ln A_t = -kt + \ln A_0$$

$$\ln A_t = -(3.4)(1) + \ln 100$$

$$\ln A_t = -kt + \ln A_0 \quad \textcircled{1}$$

$$t_{1/2} = \frac{0.693}{k}$$

$$\frac{1}{A_t} = kt + \frac{1}{A_0} \quad \textcircled{2}$$

$$\frac{t_{1/2}}{1} = \frac{1}{k(A_0)}$$

$$\frac{k}{1} = \frac{1}{t_{1/2}[A_0]}$$

$$k = \frac{1}{185(0.01)}$$

Feb 6-8:25 AM

$$\textcircled{25} \quad \text{Rate} = k [O_2] [NO]^2$$

$$\textcircled{16} \quad 100 \xrightarrow{1} 75 \xrightarrow{2} 50 \xrightarrow{3} 25 \xrightarrow{4} 12.5 \xrightarrow{5} 6.25 \xrightarrow{6} 3.125$$

Feb 6-8:37 AM

(17) $\frac{1}{A_t} = kt + \frac{1}{A_0}$

$\frac{1}{0.01} = (0.014)t + \frac{1}{0.1}$

90% reacted
 10% left over
 $0.1(0.1) = 0.01$ left over

$\frac{1}{0.01}$ is 10% of A_0

Feb 6-8:41 AM

$K = \frac{[\text{Prod}]^{\text{coeff}}}{[\text{React}]^{\text{coeff}}}$

$(s) \text{ or } (l) = 1$

K_c ? δ
 K_p P

Only (aq) and (g)

Feb 6-8:44 AM

$$15 / 14 + 16$$

Feb 6-8:47 AM