I

- 0th order test $\left(k = \frac{-([A]_t - [A]_0)}{t}\right)$

$\frac{-(0.78 - 1.00)}{(25)} \frac{M}{s} = 8.8 \times 10^{-3} \frac{M}{s}$

$\frac{-(0.47 - 1.00)}{(75)} \frac{M}{s} = 7.1 \times 10^{-3} \frac{M}{s}$

$\frac{-(0.14 - 1.00)}{200} \frac{M}{s} = 4.3 \times 10^{-3} \frac{M}{s}$

- 1st order test $\left(k = \frac{-(\ln[A]_t - \ln[A]_0)}{t}\right)$

$\frac{-(-.24_8 - 0)}{25\ s} = 9.9 \times 10^{-3}\ s^{-1}$

$\frac{-(-0.75_5 - 0)}{75\ s} = 1.0 \times 10^{-2}\ s^{-1}$

$\frac{-(-1.96_6 - 0)}{200\ s} = 9.8_3 \times 10^{-3}\ s^{-1}$

- 2nd order test $\left(k = \frac{\frac{1}{[A]_t} - \frac{1}{[A]_0}}{t}\right)$

$\frac{\left(\frac{1}{0.78} - 1\right)\frac{1}{M}}{25\ s} = 1.1 \times 10^{-2}\ M^{-1} \cdot s^{-1}$

$\frac{\left(\frac{1}{0.47} - 1\right)\frac{1}{M}}{75\ s} = 1.5 \times 10^{-2}\ M^{-1} \cdot s^{-1}$

$\frac{\left(\frac{1}{0.14} - 1\right)\frac{1}{M}}{200\ s} = 3.1 \times 10^{-2}\ M^{-1} \cdot s^{-1}$