

Chem 2 AP Homework #13-2: Problems pg. 575 #14, 15, 17, 18, 19, 20, pg. 580 #87

15 **rate = $6.2 \times 10^{-6} M/s$**

17 **$k = 0.213 s^{-1}$**

18 **(a)** $x = 2, y = 1$. The overall reaction is *3rd-order*.

(b) **$k = 10.6 M^{-2}s^{-1}$**

rate = $(10.6 M^{-2}s^{-1})(0.30 M)^2(0.40 M) = 0.38 M/s$

20 **(a)** **$k = 0.046 s^{-1}$**

(b) **$k = 0.13 M^{-1}s^{-1}$**

87 **Rate = $k[N_2O_5]$**

$k = 1.0 \times 10^{-5} s^{-1}$