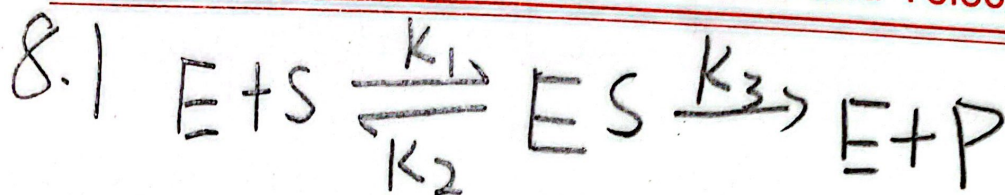




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$$k_1 = C_1 \cdot c(E) \cdot c(S)$$

$$k_2 = C_2 \cdot c(ES)$$

$$k_3 = C_3 \cdot c(ES)$$

$$\Delta E = \frac{d(E)}{dt} = k_2 + k_3 - k_1$$

$$\Delta S = \frac{d(S)}{dt} = k_2 - k_1$$

$$\Delta ES = \frac{d(ES)}{dt} = k_1 - k_2 - k_3$$

$$\Delta P = \frac{d(P)}{dt} = k_3$$

8.2 $\begin{cases} y_1' = 750y_3 - 100y_1y_2 \\ y_1(0) = 1 \end{cases}$

$\begin{cases} y_2' = 600y_3 - 100y_1y_2 \\ y_2(0) = 10 \end{cases}$

$y_3 = ES$

$y_4 = P$

$$\begin{cases} y_3' = -y_1' \\ y_3(0) = 0 \end{cases}$$

$$\begin{cases} y_4' = 150y_3 \\ y_4(0) = 0 \end{cases}$$