8.1.

(1) $\text{rate} = \dfrac{d[P]}{dt} = k_3 [ES]$ rate k_3 + ES $\to$ more P

(2) $\text{rate} = \dfrac{d[ES]}{dt} = k_1 [E][S] - k_2 [ES] - k_3 [ES]$

(3) $\text{rate} = \dfrac{d[E]}{dt} = -k_1 [E][S] + k_2 [ES] + k_3 [ES]$

(4) $\text{rate} = \dfrac{d[S]}{dt} = -k_1 [E][S] + k_2 [ES]$