

8. 1

$$\nu_1 = -\frac{\delta[E]}{\delta t} = k_1[E][S] - k_2[ES]$$

$$\nu_2 = -\frac{\delta[S]}{\delta t} = k_1[E][S] - k_2[ES]$$

$$\nu_3 = -\frac{\delta[ES]}{\delta t} = (k_2 + k_3)[ES] - k_1[E][S]$$

$$\nu_4 = -\frac{\delta[P]}{\delta t} = -k_3[ES]$$