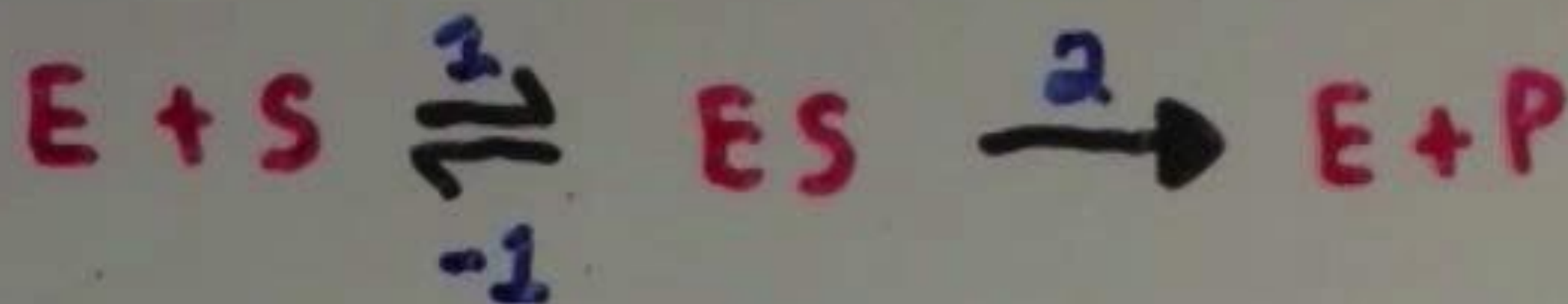


LET'S DO SOME MATH



Steady states & michaelis menten

$$V_0 = \frac{k_2 [E]_T [S]}{K_M + [S]}$$

IF $V_0 = V_{MAX}$, $[E]_T = [ES]$

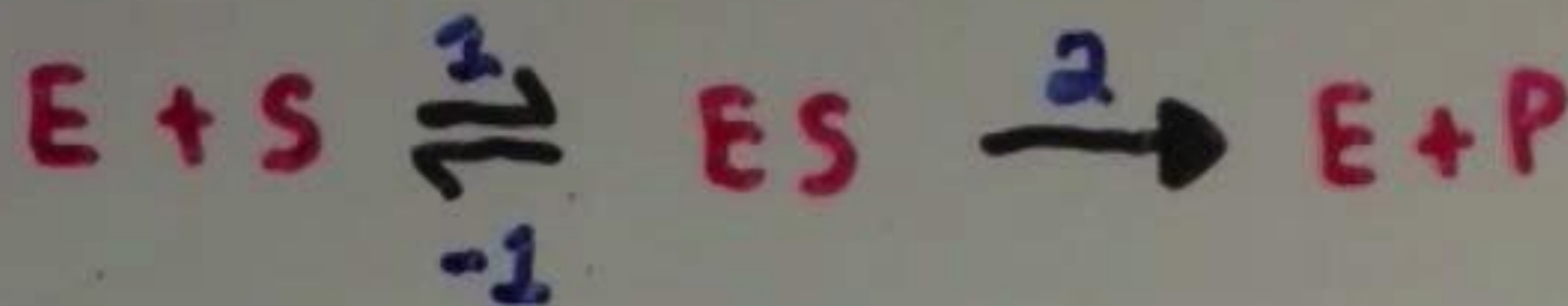
$$K_M [E]_T = V_{MAX}$$

$$V_0 = \frac{V_{MAX} [S]}{K_M + [S]}$$



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LET'S DO SOME MATH



Steady states & michaelis menten

$$V_0 = \frac{k_2 [E]_T [S]}{K_M + [S]}$$

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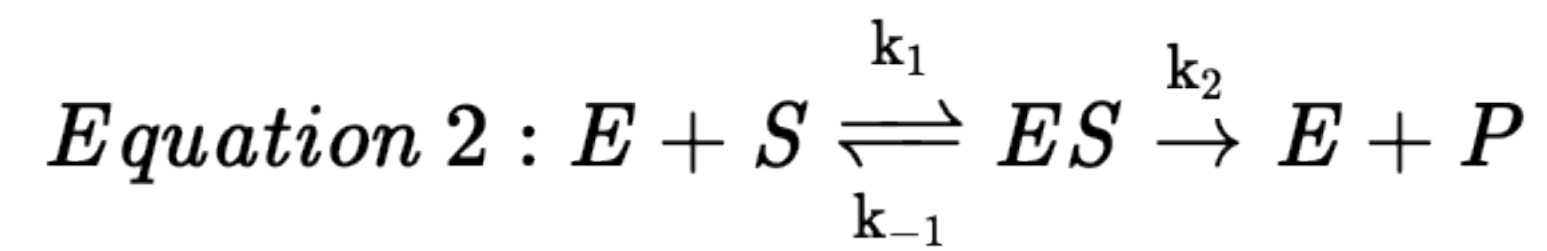
IF $V_0 = V_{MAX}$, $[E]_T = [ES]$

$$K_2 [E]_T = V_{MAX}$$



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$$\textit{Equation 1} : \frac{1}{V_o} = \frac{K_m}{V_{max} * [S]} + \frac{1}{V_{max}}$$



$$\textit{Equation 3} : K_m = \frac{k_{-1} + k_2}{k_1}$$