SOME ASSUMPTIONS WE'VE MADE

1. OUR SOLUTIONS ARE BEHAVING IDEALLY

$$E+S \stackrel{2}{\rightleftharpoons} ES \stackrel{2}{\rightleftharpoons} E+P$$

$$RATE_1 = K_1[E][S] \qquad RATE_2 = K_2[ES]$$

- Q. OUR CONSTANTS ARE INDEED CONSTANT
 - [E] PROTEIN SYNTHESIS / DEGRADATION

 K ENVIRONMENTAL FACTORS
- 3. S P WITHOUT ENZYME IS NEGLIGIBLE

SUMMARY

RATE =
$$k_1[E][S]$$
 RATE = $k_2[ES]$

Q. IF [E] IS CONSTANT THEN THERE
EXISTS A VMAX