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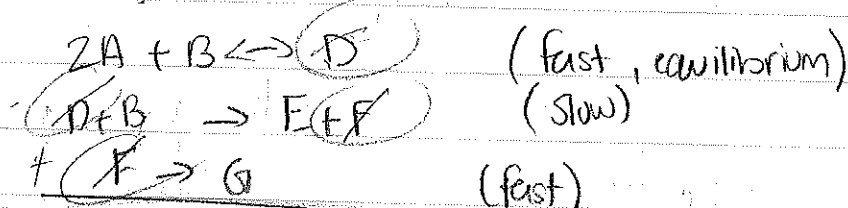
In studying reaction kinetics, what is the purpose of starting with a concentration of one reactant that is much higher than other?

- A) The concentration of that reactant is virtually unchanged during the reaction
- 2) Now that one reactant is essentially constant in concentration, rate of reaction will be dependent only on the other (low) reactant.

rate limiting step - limits the rate of overall thing due to diff. steps

- Rate-determining step - when a reaction involves many steps we can approximate the rate of the overall reaction by the rate of the slowest step.

Write the overall reaction & the rate law expression that corresponds to following mechanism. Be sure to eliminate intermediates from answers.



$$\boxed{D.) \text{ rate: } k[A]^2[B]^2}$$

$$k = \frac{D}{[A]^2[B]}$$

$$k[A]^2[B][B] =$$

$$\frac{k[A]^2[B]}{[A]^2[B]} = D$$