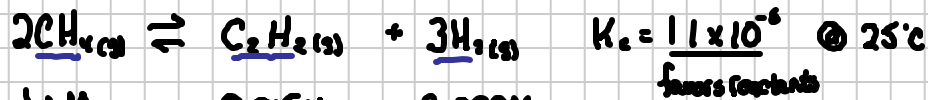


Lecture 8 2 The Law of Mass Action and the Reaction Quotient

Note Title

9/19/2011



Initial	<u>1.1 M</u>	$Q < K_c$	<u>0.015 M</u>	<u>0.028 M</u>
Change	-2x	→	+1x	+3x

Equilibrium

reaction quotient

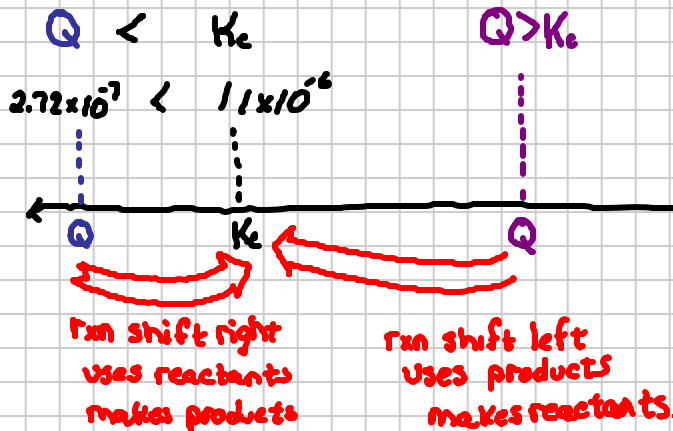
Equl conc. \forall/N L.M.A. $Q = \frac{[\text{C}_2\text{H}_2][\text{H}_2]^3}{[\text{CH}_4]^2} = \frac{(0.015\text{M})(0.028\text{M})^3}{(1.1\text{M})^2} = 2.72 \times 10^{-7}$

$$2.72 \times 10^{-7} \neq K_c = 1.1 \times 10^{-6}$$

$Q \neq K_c$... conc. are not equil. conc.

$Q = K_c$... conc. ARE equil conc. No Δ .

Q ... must get larger
... prod. inc., react. decrease



$Q = K_c$
- No change
- equil. conc