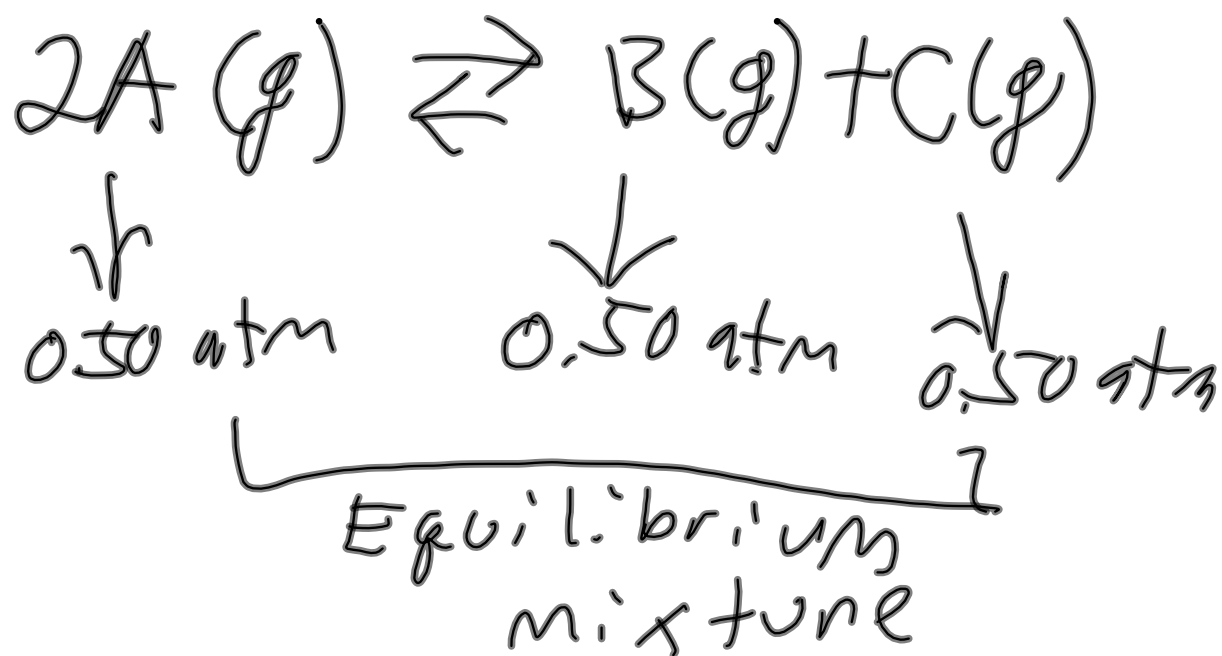


$$K_p = \frac{P_{\text{NO}_2}^2}{P_{\text{N}_2\text{O}_4}} = 0.660$$

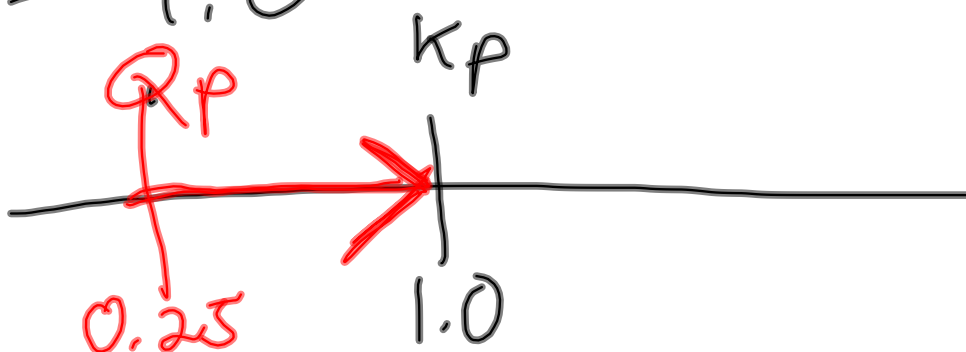
$$= \frac{(0.19)^2}{0.05} = 0.722$$

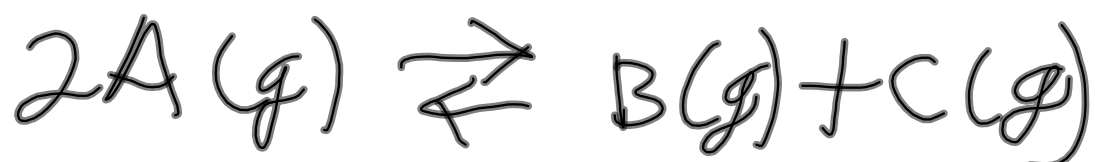
$$K_p = \frac{(0.1902)^2}{0.0549} = 0.659$$



$$Q_p = \frac{(0.5)(0.5)}{1.06} = 0.25$$

$$K_p = 1.0$$

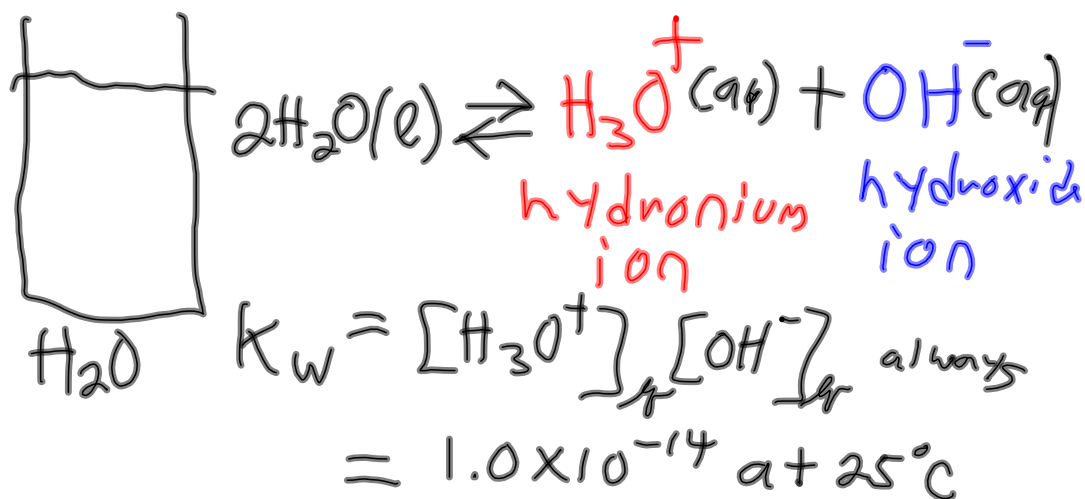




	A	B	C
I	1.0	0.50	0.50
C	$-2x$	$+x$	$+x$
E	$1.0-2x$	$0.50+x$	$0.50+x$

$0 < x < 0.5$

ACID / BASE EQUILIBRIA



An **ACID** is a substance that produces H_3O^+ (sometimes written as H^+) ions when dissolved in H_2O (Arrhenius)

A **BASE** is a substance that produces OH^- ions when dissolved in H_2O . (Arrhenius)

An **ACID** is a proton donor (Bronsted/Lowry)

A **BASE** is a proton acceptor (Bronsted/Lowry)

