$$K = \frac{[\text{Products}]^{\text{coeff}}\ [\text{Product}]^{\text{coeff}}}{[\text{Reactants}]^{\text{coeff}}}$$

$$P\ \frac{[A][B]^2}{R\ [AB_2]}$$

R $AB_2 \rightarrow$ P $A + 2B$

May 3-9:23 AM

$$A + B \rightleftharpoons C + D$$

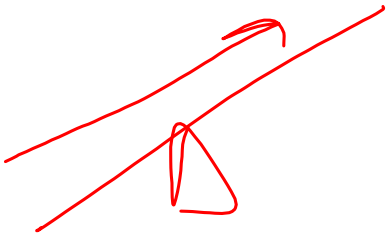
used up A+B

more (+1)

May 3-9:42 AM

(18) $C_{(s)} + O_{2(g)} \rightleftharpoons CO_{2(g)} + heat$

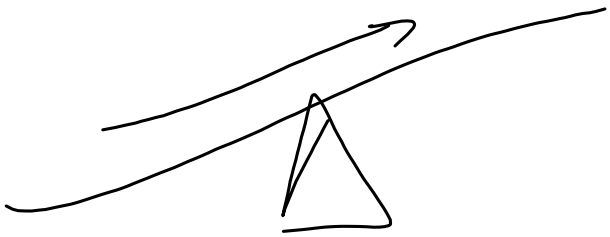
increase (stress) → decrease



May 3-9:44 AM

(19) $2HBr + heat \rightarrow H_2 + Br_2$

if incr. T



May 3-9:45 AM

$PbCl_2(s) \rightarrow Pb^{+2} + 2Cl^-$

rxn shifts ←

More (s) is added

less Pb^{+2}

less Cl^-

May 3-9:48 AM

	N_2	+	$3H_2$	$\rightleftharpoons$	$2NH_3$	
R						
I	1		1.6		~~0~~	
C	− 0.4		− 1.2		+ 0.8	MOLE RATIO
E	0.6		0.4		0.8	

$$K_{eq} = \frac{[NH_3]^2}{[N_2][H_2]^3} = \frac{(0.8)^2}{(0.6)(0.4)^3} = 16.67$$

May 3-9:49 AM

(25) $CaF_2(s) \rightarrow Ca^{+2}(aq) + 2F^-(aq)$ M ratio

$x = 2.15\times10^{-4}$ x 2.15×10^{-4} $2x$ 4.3×10^{-5}

$K_{sp} = [Ca^{+2}][F^-]^2$

$(2.15\times10^{-4})(4.3\times10^{-5})^2 = 4\times10^{-11}$

$\frac{1.6\times10^{-3}\ g\ CaF_2}{0.1\ L} \cdot \frac{1\ mole\ CaF_2}{78\ g\ CaF_2} = 2.15\times10^{-4}\ M\ CaF_2$

May 3-9:54 AM

(26) $BP = 101.56°C$ normal $100°C$

$\Delta T = (K_b * m)\, i$

$1.56 = (0.52 * m)\, 1$

$K_b = 0.52$

$C_6H_{12}O_6$

3m

(27) $\Delta T = (K * m)\, i$

$= (1.86 * 0.15)\, 3$

$\Delta T = 0.837$

$CaCl_2 \rightarrow Ca^{+2} + 2Cl^-$

$-0.837°C$

May 3-9:58 AM