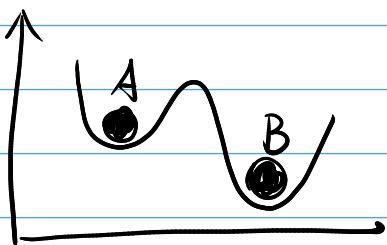


# MATE 664 L01

Jan -05 2026

## Slide 20



$$\Delta G^\circ = G_B - G_A$$

means reaction free energy

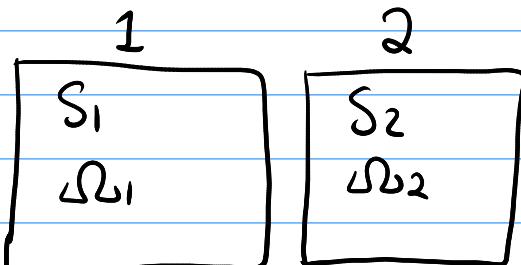
At reaction equilibrium

$$\Delta G = 0 \text{ (change of A, B ratio)}$$

$$\approx \Delta G^\circ + RT \ln \frac{x_B}{x_A}$$

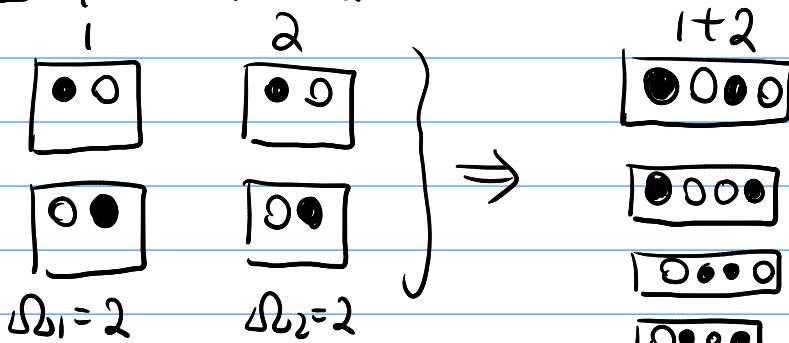
## Slide 23

Logarithm of microstate counting func



$$S_T = S_1 + S_2 \leftarrow S \text{ (entropy) is extensive}$$

$$\Delta\Omega_T = \Delta\Omega_1 \cdot \Delta\Omega_2$$



$$\Delta\Omega_T = 2 \times 2 = 4$$

