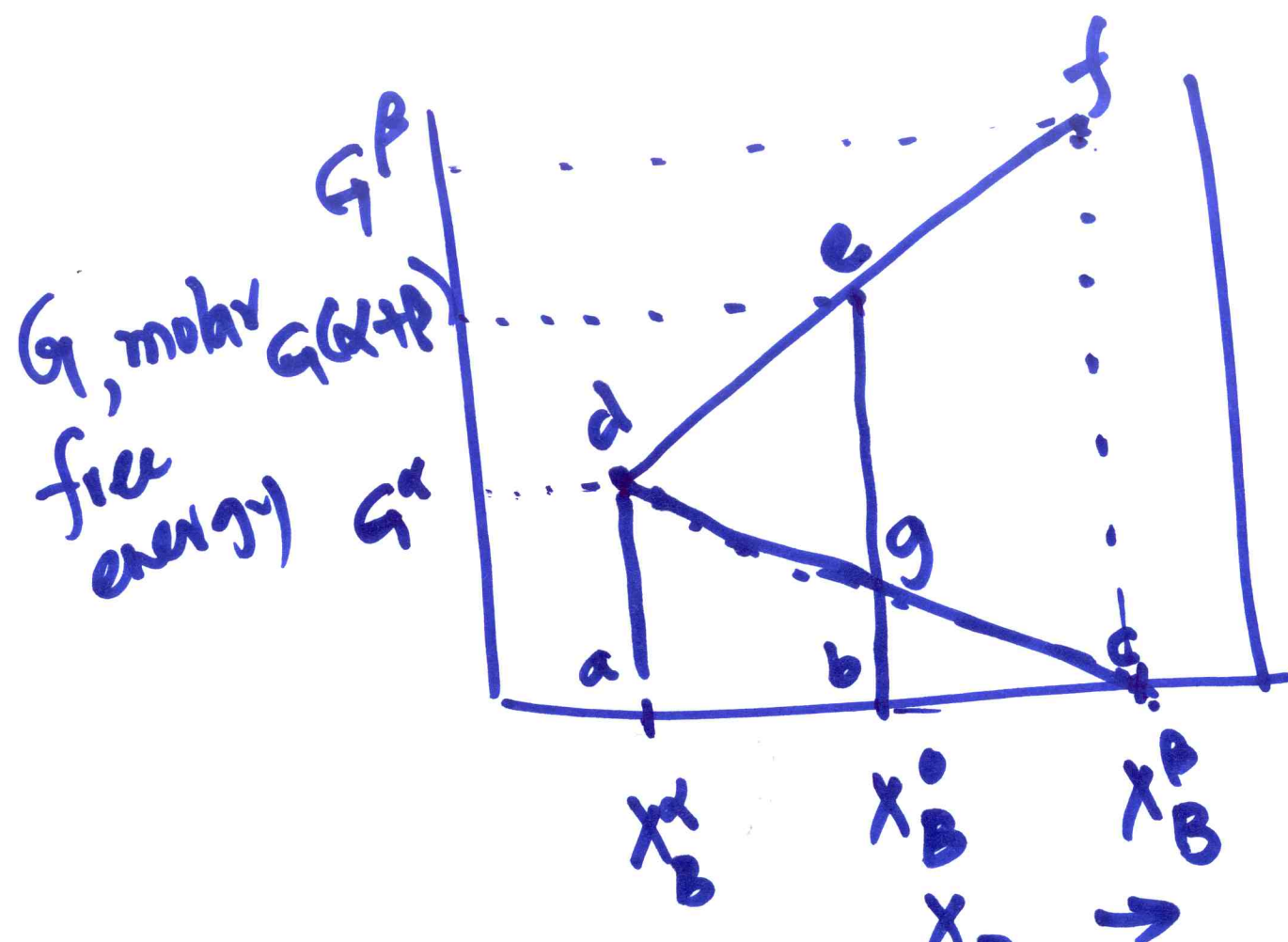


Thermodynamic
relations



$$\Delta bcbg \parallel \Delta acd$$

$$\Delta deg \parallel \Delta dfc$$

$ad = G^\alpha$ (Molar free energy of α)
 $cf = G^\beta$ (Molar free energy of β)
 $\frac{bg}{ad} = \frac{bc}{ac}$ $\frac{ge}{cf} = \frac{ab}{ac}$

By lever rule:

$$\frac{bc}{ac} \text{ mol of } \alpha \quad \text{and} \quad \frac{ab}{ac} \text{ mol of } \beta \equiv 1 \text{ mol}$$

bg and ge - represent contributions from α and β - phases to the total free energy for 1 mol of alloy

G

