

$$F_{1s} = F_{10} - \sum \xi_1 \Rightarrow \xi_1 = F_{10} - F_{1s} = 1 - 0,345 = 0,655$$

$$F_{r1} = F_{10} + \sum \xi_2 = 0,345$$

$$F_{r1} = F_{10} + F_0 \gamma_2 \Rightarrow \gamma_2 = \frac{F_{r1}}{F_0} = \frac{0,345}{2,33} = 0,148$$

3/ calcul des débits molaire à la sortie de réaction.

$$F_{1s} = 0,345 \text{ mol/s}$$

$$F_{r1} = 0,345 \text{ mol/s}$$

$$F_{2s} = F_{20} + F_0 (-\gamma_1 - \gamma_2)$$

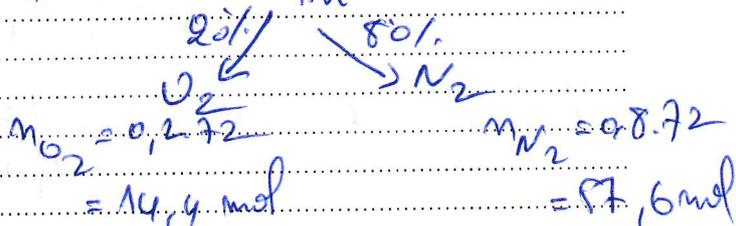
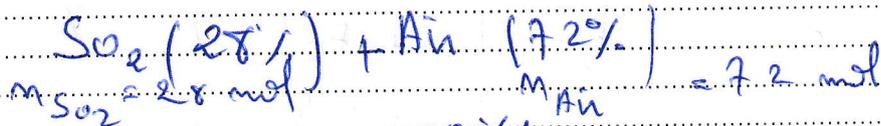
$$= \frac{1}{0,75} + 2,33(-0,28 - 0,148) = 0,336 \text{ mol/s}$$

$$F_{3s} = F_{30} + F_0 (3\gamma_1 + \gamma_2)$$

$$= 2,33(3 \cdot 0,28 + 0,148) = 2,3 \text{ mol/s}$$

$$F_{4s} = F_{40} + (\xi_1 - \xi_2) = 0,655 - 0,345 = 0,31 \text{ mol/s}$$

Exercice 2:



1/ calcul de γ

$$F_{1s} = F_{10} / (1 - X_1) = F_{10} + F_0 \alpha_1 \gamma_1$$

$$\gamma_1 = \frac{F_{10}}{F_0} \cdot X_A = \frac{n_{10}}{n_0} \cdot X_A = \frac{28}{4,24} \cdot 0,45 = 0,30$$

2/ calcul de α et β

$$\beta = \frac{P_0 / P_0}{P_A} = \frac{15 / 273}{14,85 \cdot 10^5 / 100} = 0,123 < 1 \text{ dilution}$$

$$\alpha = \frac{\Delta P}{P_A}$$

$$I = \text{Rapport d'Inerte} = \frac{n_{\text{I}}}{n_0}$$

Si $\beta > 1$ contraction.