

$$\boxed{192 - \frac{4}{10} q_1 = q_2} \quad \text{Funcția de Rețineri DE LA FIRMA 2.}$$

EG Cournot

$$\begin{cases} q_1 = 120 - \frac{1}{4} q_2 \\ q_2 = 192 - \frac{4}{10} q_1 \end{cases} \quad \left\{ \begin{array}{l} \text{Rezoluția de} \\ \text{interio} \end{array} \right.$$

$$\begin{array}{l} \cancel{\frac{4}{5} q_1 + 120 + q_2 = 0} \\ \cancel{5 q_2 - 192 + q_1 = 0} \end{array} + \begin{cases} q_1 - 120 + \frac{1}{4} q_2 = 0 \\ q_2 - 192 + \frac{2}{5} q_1 = 0 \end{cases} \quad (-\frac{1}{4})$$

$$q_1 - 120 + \frac{1}{4} q_2 - \frac{1}{4} q_2 + \frac{1}{4} 192 - \frac{1}{4} \frac{2}{5} q_1 = 0$$

$$0,9 q_1 - 72 = 0 \quad q_1 = 80$$

$$q_2 = 192 - \frac{4}{10} \cdot 80 = 160.$$

Equilibrio de Cournot: (80, 160) Apdo B

Equilibrio con coludat $\rightarrow$ maximize π conjunta

$$\begin{aligned} \max_{q_1, q_2} \pi_1 + \pi_2 &= \frac{500 - (q_1 + q_2)}{10} (q_1 + q_2) - (0,1 q_1^2 + 2 q_1 + 0,25 q_2^2 + 2 q_2) \\ \text{cu: } \frac{\partial \pi}{\partial q_1} &= 0 \quad \frac{\partial \pi}{\partial q_2} = 0 \end{aligned}$$

$$\frac{\partial \pi}{\partial q_1} = 0 \quad 50 - \frac{2}{10} (q_1 + q_2) - 0,2 q_1 - 2 = 0$$