

Rec

2. k, L

$P_{ngK} = 10$ $P_{ngL} = 2$

$r = 5$ $w = 2$

$MRT = \frac{P_{ngL}}{P_{ngK}} = \frac{2}{10}$

EQUILIBRIUM

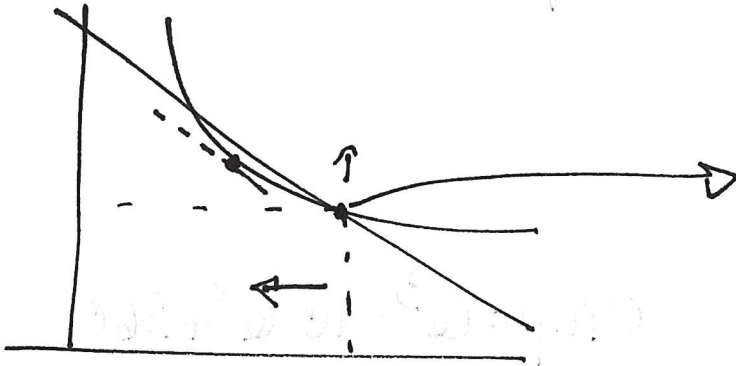
$MRT = \frac{w}{r}$

$\frac{2}{10} \neq \frac{2}{5}$

NO OPTIMUM

$\frac{1}{5} < \frac{2}{5}$

| pte. ISOLASIA < | pte. NO OPT



For closer equilibrium to be $\downarrow L$ y $\uparrow K$

3. $X = 10KL$ $p_K = 100$ $p_L = 20$ (tes rne) $K = 20$

min $p_L L + p_K K$
s.t.: $10KL = X$ $\rightarrow MRT = \frac{p_L}{p_K}$

Given $K = 20 \rightarrow X = 10 \cdot 20 L$

$X = 200L \rightarrow L = \frac{1}{200} X$

Why? = to find $p_L L + p_K K = C(x)$

$C(x) = 20 \frac{1}{200} x + \frac{100 \cdot 20}{1} = \frac{1}{10} x + 2000$

$CV = \frac{1}{10} x$

9. Industria competitiva.

$$CTC_p = Q^3 - 10Q^2 + 36Q \quad \text{Miel de}$$

produc e aplica e cada presa.

Je lo han hecho p el potencial de la

$$Q = 5$$

10. Industria competitiva $CTC_p = Q^3 - 10Q^2 + 36Q$

de de precio $Q = 4000 - 5p$

la presa de la industria

$$Q = 4000 - 5 \cdot 11 = 3945$$

Como cada presa produce $Q = 5$

$$\frac{3945}{5} = k^e \text{ e } p^e$$

$$\underline{\underline{k = 789}}$$

Ningun e correble

Como p by una empresa
errata

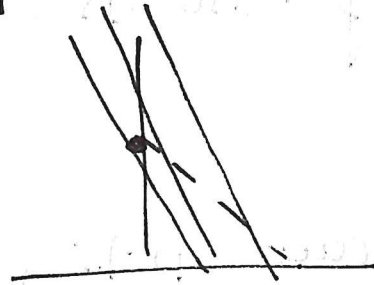
$$4. \quad Q = K + L \quad p_K = 3 \quad p_L = 4.$$

or LP:

$$\begin{aligned} \min & p_L L + p_K K \\ \text{s.t.} & K + L = Q \end{aligned} \quad \left\{ \begin{array}{l} \text{Lichtkurve} \\ \text{von den} \\ \text{Faktoren} \\ \text{Produktion} \end{array} \right.$$

$$RNT = 1$$

$$\frac{w}{r} = \frac{p_L}{p_K} = \frac{4}{3} > 1$$



solu use: K L=0

c. Lp zu lösen

$$Q = K$$

e. zu

$$CT(Q) = 3 \cdot Q + 0$$

$$\boxed{CT(Q) = 3Q}$$

$$5. \quad Q_1 = 24 - p_1$$

$$Q_2 = 24 - p_2$$

Monopolist:

$$(24 - Q_1)Q_1 + (24 - Q_2)Q_2 \quad CM_f = 6.$$

$$\max_{\{Q_1, Q_2\}} \pi = p_1 Q_1 + p_2 Q_2 - CT(Q_1 + Q_2)$$

$$\left. \begin{array}{l} \text{also} \\ \frac{\partial^2 \pi}{\partial Q_1^2} = -2 < 0 \\ \underline{\underline{\text{Max}}} \end{array} \right\}$$

$$\text{qwo: } \frac{\partial \pi}{\partial Q_1} = 0 \quad 24 - 2Q_1 - 6 = 0$$

$$24 - 2Q_2 - 6 = 0$$

$$Q_1 = \frac{18}{2} = 9$$

$$Q_2 = \frac{18}{2} = 9.$$

$$6. C_t = 0$$

$$Q = 150 - p \quad P = Q \text{ univ.}$$

$$\text{Como } \Pi = pQ = (150 - Q)Q.$$

$$\text{Como } C_M = 0.$$

$$\Pi_M = 0 \Rightarrow 150 - 2Q = 0 \quad Q = 75$$

$$p = 150 - 75 = 75$$

$$\boxed{Q = 75}$$
$$p = 75$$

$$7. B^0 \rightarrow \text{como } p = 75, \quad Q = 75$$

$$\Pi = 75 \cdot 75 - 0 = \underline{\underline{5625}}$$

8. Inedie competitiva

$$CTLp = Q^3 - 10Q^2 + 36Q$$

coste de coste de

le empresa competitiva

P_{lp}

Como el precio c_{lp} u c_{med} es el
uno de la c_{med} .

$$c_{p_{lp}} = \frac{CT}{Q} = Q^2 - 10Q + 36$$

$$\text{Como: } \frac{\partial c_{p_{lp}}}{\partial Q} = 0 \quad 2Q - 10 = 0 \quad \boxed{Q^* = 5}$$

$$p = \text{un } c_{p_{lp}} = c_{p_{lp}}(Q=5) = 5^2 - 10 \cdot 5 + 36 =$$

$$= 25 - 50 + 36 = 11 \quad \boxed{p = 11}$$