

$$I = 3000$$

$$3000 = 3V + 6Q$$

$$V = 0$$

$$3000 - 6 = 6Q$$

$$Q = 2994$$

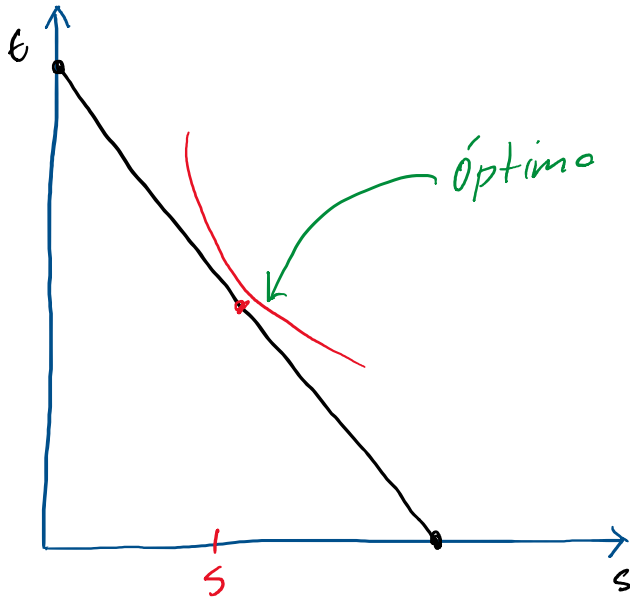
$$V = 2997$$

$$TMT = \frac{-3}{6} = -\frac{1}{2}$$

3)

$$500 = 50S + 50T$$

#Sacar los receptos



$$+MS = UM$$

$$UM$$

$$U(s, t) = 2st$$

$$U(s', t) = t$$

$$U(s, t') = s$$

$$TMS = -\frac{2}{2s} = -\frac{t}{s}$$

$$\rightarrow TMS = TM ?$$

$$-\frac{t}{s} = -1$$

$$-t = -s$$

$$t = s$$

#Sustituir en RP

$$500 = 50s + s \quad t = s$$

$$500 = 50s + 50s$$

$$500 = 100s$$

$$5 = s$$

$$4) \quad U(A, B) = A^{0.2} B^{0.8}$$

$$U(A', B) = \frac{1}{5} A^{\frac{4}{5}} \cdot B^{\frac{4}{5}}$$

$$U(A, B') = A^{\frac{1}{5}} \cdot \frac{4}{5} B^{\frac{-1}{5}}$$

Restricción Presupuestaria

$$10,000 = 500A + 1000B$$

$$A = 0$$

$$B = 0$$

$$10,000 = 1000B$$

$$10,000 = 500A$$

$$10 = B$$

$$\frac{10,000}{500} = A$$

$$\underline{10 = B}$$

$$\underline{20 = A}$$

TMS

$$\begin{aligned} \frac{UM_A}{UM_B} &= \frac{0.2 A^{-0.8} \cdot B^{0.8}}{A^{0.2} \cdot 0.8 B^{-0.2}} = \frac{\cancel{0.2}}{4(\cancel{0.2})} \cdot \frac{1}{A^{0.8} \cdot A^{0.2}} \cdot B^{0.8} \cdot B^{0.2} = \\ &= \frac{1}{4} \cdot \frac{1}{A} \cdot B = \frac{B}{4A} \end{aligned}$$

TMT

$$-\frac{P_A}{P_B} = -\frac{500}{1,000} = -2$$

Igualar

$$-2 = \frac{B}{4A}$$

$$-2 \cdot 4 = \frac{B}{A}$$

$$8A = B$$

Syst. en restrições por s.u.

$$10,000 = 500A + 1,000B$$

$$10,000 = 500A + 1,000(-8A)$$

$$10,000 = 500A - 8,000A$$

$$10,000 = -7,500A$$

$$\frac{10,000}{-7,500} = A$$

$$A =$$

$$A =$$