Facultat de Ciències Polítiques i de Sociologia<br>Grau de Ciència Política i de Gestió Pública

## Economia i comerç internacional (International Economics)

## TUTORIAL: February 22 ${ }^{\text {nd }} 2016$

1) Countries A and B produce cheese and cloth by using labor as the unique factor of production. They use the following technology:

|  |  |  |
| :--- | :--- | :--- |
|  | Country A | Country B |
| Cloth (hour) | 4 units | 10 units |
| Cheese (hour) | 8 units | 10 units |

The demand and supply function of cloth in each country is:

## Country A:

Demand: $\mathrm{Pt}=150-8 \mathrm{Qt}$
Supply: $\mathrm{Pt}=40+2 \mathrm{Qt}$

## Country B:

Demand: $\mathrm{P}_{\mathrm{t}}=60-5 \mathrm{Qt}$
Supply: $\mathrm{Pt}=4+3 \mathrm{Qt}$
a) Determine the price and the quantity of cloth when the two countries are in autarky.
b) The two countries consider the possibility of trading cloth. We have to assess the possibility offered by their technologies. Calculate the maximum and minimum prices that would allow trade. Could such an exchange be possible? Which country has a comparative advantage in exporting cloth?
2) At the current level of prices a country produces computers with 25 units of labor per unit of capital, and cars with 40 units of labor per unit of capital. Let us consider that the total quantity of capital in this country is kept as fixed.

- In this case the economy is endowed with 800 units of labor and 100 units of capital. Draw a picture to determine the distribution of the two factors of production across the two sectors when the country produces both types of goods. In which type of goods does the country specialize?
- Consider that the supply of units of labor increases to 1,000 and then to 1,200 . What happens with the specialization pattern of this country?

3) Spain and Portugal are endowed with two factors of production: capital and labor. Both factors are adopted in the production of goods A and goods B. The countries adopt the same technology. Goods A is capital-intensive and Spain is capital-abundant. Determine the effects that can be produced on the Spanish terms of trade by these two events:

- An increase of the capital stock in Spain
- An increase of the units of labor in Spain.

