## Answer on Question # 44839, Economics, Finance

**Task:**

Let two countries with offer curves $y = 5x + 10x^2$ and $y = 20x - 5x^2$

(a) Determine the equilibrium terms of trade.

(b) Determine the autarky terms of trade and show that the equilibrium terms of trade lie between the two autarky ones.

**Answer:**

(a) Determine the equilibrium terms of trade.

$$\begin{cases} y = 5x + 10x^2 \\ y = 20x - 5x^2 \end{cases}$$

$$5x + 10x^2 = 20x - 5x^2$$

$$\begin{bmatrix} x = 0 \\ x = 1 \end{bmatrix} \Rightarrow (x = 0; y = 0); (x = 1; y = 15)$$

These functions intersect at points x=0 and x=1 and so if you look at the graphics of these functions is the equilibrium terms of trade lie between the two autarky ones.
It is more rational.