

## Assignment 2

### *Answers*

**Question 1** (4 marks) *Explain clearly why we have to subtract TV from TR in order to calculate seller's surplus.*

**Seller's surplus** measures by how much the seller is better off after trade. Or in other words, seller's surplus is the seller's gains from trade. True that after trade Darlene has 1.50 in revenue, but now she does not have the eggs, the value of which are represented by her TV. If she did not trade she would still have the eggs which have values for her. That is why to calculate by how much she is **better off** we need to subtract TV from the total revenue.

Alternatively Darlene's TV of the eggs that she sold measures the the minimum payment she would accept for her eggs (which would leave her indifferent between trade/no trade) and anything on top of that is her surplus - the revenue in the excess of the minimum acceptable payment.

**Question 2** (4 marks) Producers of peanuts discover a new technology that allows them to double yield per acre of land without increasing the production cost. What happens in the market for almonds?

In market for peanuts the supply curve shifts right; demand is the same. Obviously the market reaches new equilibrium with lower price and higher quantity traded.

Since almonds and peanuts are substitutes, and the price of peanuts decreased, the demand for almonds falls: people substitute towards now cheaper peanuts and want to buy less almonds at each price. Supply of almond stays the same, with lower demand the market will reach new equilibrium with lower price of almonds. Which will not make producers of almonds very happy as now they get lower surplus.

**Problem 1** Equilibrium values:  $P^* = 15$ ,  $Q_j^* = 15$ ,  $Q_m^* = 10$ .

for the diagram: MVs must be labeled, all intercepts must be labeled, initial situation:  $Q_j = 20$ ,  $Q_m = 5$ . Gains from trade: the triangle between the marginal values, but **only for the units that were actually traded: between initial situation and the equilibrium.**

Unlabelled diagram - deduct .5 Incorrectly shaded gains from trade m- minus 1 point.