Homework, Ch.1

1. Landsburg, Ch.1, N1 (numerical exercise).
2. Landsburg, Ch.1, N3.
3. Landsburg, Ch.1, N4.
4. Landsburg, Ch.1, #5.(problem set)
5. Landsburg, Ch.1, #16.
6. Landsburg, Ch.1, #31.

1 \( P = 1 \), \( Q = 800 \) oranges/day

2 Supply: \( Q = 800P \);
   Demand: \( Q = -200P + 900 \).
   \( P = 0.90 \), \( Q = 720 \) oranges/day. Posttax price for the supplyer is $0.90.

3 Supply: \( Q = 800P - 160 \);
   Demand: \( Q = -200P + 940 \).
   \( P = 1.10 \), \( Q = 720 \) oranges/day. Posttax price for the supplyer is $0.90.

4 a. The supply decreases. The price increases and the quantity decreases.
   b. The demand for corn increases. Both the price and the quantity increase.
   c. Tough question. After the deaths of consumers and farmers, the demand as well as the supply of corn decrease. We’re not sure about the movement of price and quantity.
   d. As we see in Taiwan, labor moves from the agriculture sector to the manufacturing sector in response to the industrial wage increase. That implies the supply of agriculture product to decrease. The demand side is more complicated: we have to consider both the incomes changes of workers and capitalists.

5 False. Since the supply curves are the same in two countries, the same equilibrium quantity before taxation implies the same equilibrium price as the following graph shows. From the figure, we see a smaller price increase in Lower Slobboiva leads to a larger cut in cigarettes.

6 a. Demand shifts up by $50. Supply shifts vertically up by $200.
   b. The new price of a shower is between $550 and $700. (Draw a figure
c. It is bad for consumers, who pay more than $50 for a digital control they value at $50. It is also bad for suppliers, who enjoy a price increase of less than $200 though their costs increase by $200.