Chapter 2

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| Production Possibilities | | |
| Possibility | Maximum Units of Butter per week | Maximum Units of Guns per Week |
| A | 200 | 0 |
| B | 180 | 60 |
| C | 160 | 100 |
| D | 100 | 160 |
| E | 40 | 200 |
| F | 0 | 220 |

Questions:

1. If the economy moves from possibility C to D, the opportunity cost per unit of guns will be how many units of butter?
2. If the economy moves from possibility D to E, the opportunity cost per unit of guns will be how many units of butter?
3. In general terms, what happens to the opportunity cost of guns as the output of guns increases?
4. Is a combination of 140 units of butter and 130 units of guns per week attainable?
5. Is a combination of 70 units of butter and 170 units of guns per week attainable?

Answers:

1. 1 butter
2. 1.5 butters.
3. Increase
4. Outside of PPF. Not attainable
5. Inside of PPF. Attainable but inefficient.

Chapter 3

Timber beams are made from logs and in the process of making beams the mill produces sawdust, which is made into pressed wood. In the market for timber beams, the following events occur one at a time.

* + The wage rate of sawmill workers rises. (*Supply of timber beams decreases, price increases.)*
  + The price of sawdust rises*; (The quantity supplied for sawdust increases, the supply for timber beams (complement) increases and shifts rightward, and price drops.)*
  + The price of a timber beam rises; (*The quantity supplied for timber beam increases along the supply curve, law of supply)*
  + The price of a timber beam is expected to rise next year*. (The supply this year drops and supply curve shifts leftward.)*
  + Environmentalists convince Parliament to introduce a new law that reduces the amount of forest that can be cut for timber products. (*Less supply for timber beams, and supply curve shifts leftward.)*
  + A new technology lowers the cost of producing timber beams. (*Supply increases and supply curve shifts rightward.)*

Suppose the demand and supply functions for some product are given by

QD = 100-3P

QS = 10 + 2P

* 1. Calculate the equilibrium price and quantity; (P=$18, quantity=46 units)
  2. Suppose there is an increase in demand so that the new demand function is given by QD = 180 – 3P; Compute the new equilibrium price and quantity. (p=$3.4, quantity = 78 units)
  3. Now suppose that, with the new demand curve in place, there is an increase in supply so that the new supply function is given by QS = 90+2P. Compute the new equilibrium price and quantity. (p=$18, quantity = 162 units)

Chapter 4

For each of the following events, state the relevant elasticity concept. Then compute the measure of elasticity, using average prices and quantities in your calculations. In all cases, assume that these are *ceteris paribus* changes.

When the price of theatre tickets is reduced from $14 to $11, ticket sales increase from 1200 to 1350. *(price elasticity of demand, -0.49)*

As average household income in Canada increases by 10%, annual sales of Toyota Camrys increase from 56,000 to 67,000. *(Income elasticity of demand, 1.79)*

After a major failure of Brazil’s coffee crop sent coffee prices up from $3 per kilogram to $4.80 per kilogram, sales of tea in Canada increases from 7500 kg per month to 8000 kg per month. *(cross elasticity of demand, 0.14)*

an increase in the world demand from pulp (used in producing newsprint) increases the price by 14 percent. Annual Canadian production increases from 8 million tonnes to 11 million tonnes. *(price elasticity of supply, 2.26)*