Assignment 1

1.

a) Buying a car from General Motors sends money from households to the goods market, and on to firms. It also sends goods from firms to the goods market, and on to the households.

b) General Motors paying the designer of the car sends money from the firm to the factors market and on to the households. It also sends the labour factor of production from the households to the factors market and on to the firms.

c) General Motors expanding its plant and renting an adjacent building is a consumption of a factor of production, capital, from the factors market towards the firm. It is also a flow of money from the firm to the factors market, to pay for this consumption.

d) General Motors hiring a summer student is a flow of money from the firm to the factors market, which then goes to the households. It is also a flow of labour from households to the factors market, and then to the firm.

2.

a) $opp_s = \frac{4}{40}$, therefore the opportunity cost of producing a cap for Sue is 0.1 jackets.

b) $opp_t = \frac{4}{80}$, therefore the opportunity cost of producing a cap for Tessa is 0.05 jackets.

c) Tessa has a comparative advantage in producing caps, because she can produce the caps at a lower opportunity cost than Sue.

d) Both Sue and Tessa gain from the specialization and trade. If Sue specializes in jackets, and Tessa specializes in caps, then if Sue trades 1 jacket for 15 caps, Tessa gets a jacket, which is worth 20 caps, for the cost of only 15 caps. Similarly, Sue gets 15 caps for the cost of 10 caps.

Both Sue and Tessa benefit from this trade, since they both get better value than they would have otherwise been able to achieve.

3. The Law of Demand states that, with all factors remaining the same, as the price of a good increases, the quantity demanded for that good will fall.

One example are gas prices. When gas prices fall, more quantities of gas are sold, since people want to get a better deal. When gas prices rise, people hold out on getting gas, and demand falls since they are waiting for the price to lower.

The example given does not violate the Law of Demand because while both the price and quantity increased, not all other factors remained the same as the law requires.

the number of people who will want to see an older movie that has been in theaters for a long time is lower than the number of people who want to see a new blockbuster movie. While the price increased, the number of people who will want to go to the movie also increased and that is why there are more people at the blockbuster, despite the greater price.

4.

$$\begin{aligned} P_1 &= 100 - 5Q \\ P_2 &= 40 + 10Q \\ P_1 &= P_2 \\ 100 - 5Q &= 40 + 10Q \\ 60 &= 15Q \\ Q &= 4 \\ P_1 = P_2 &= 100 - 5 * 4 = 80 \end{aligned}$$