Determinants of demand

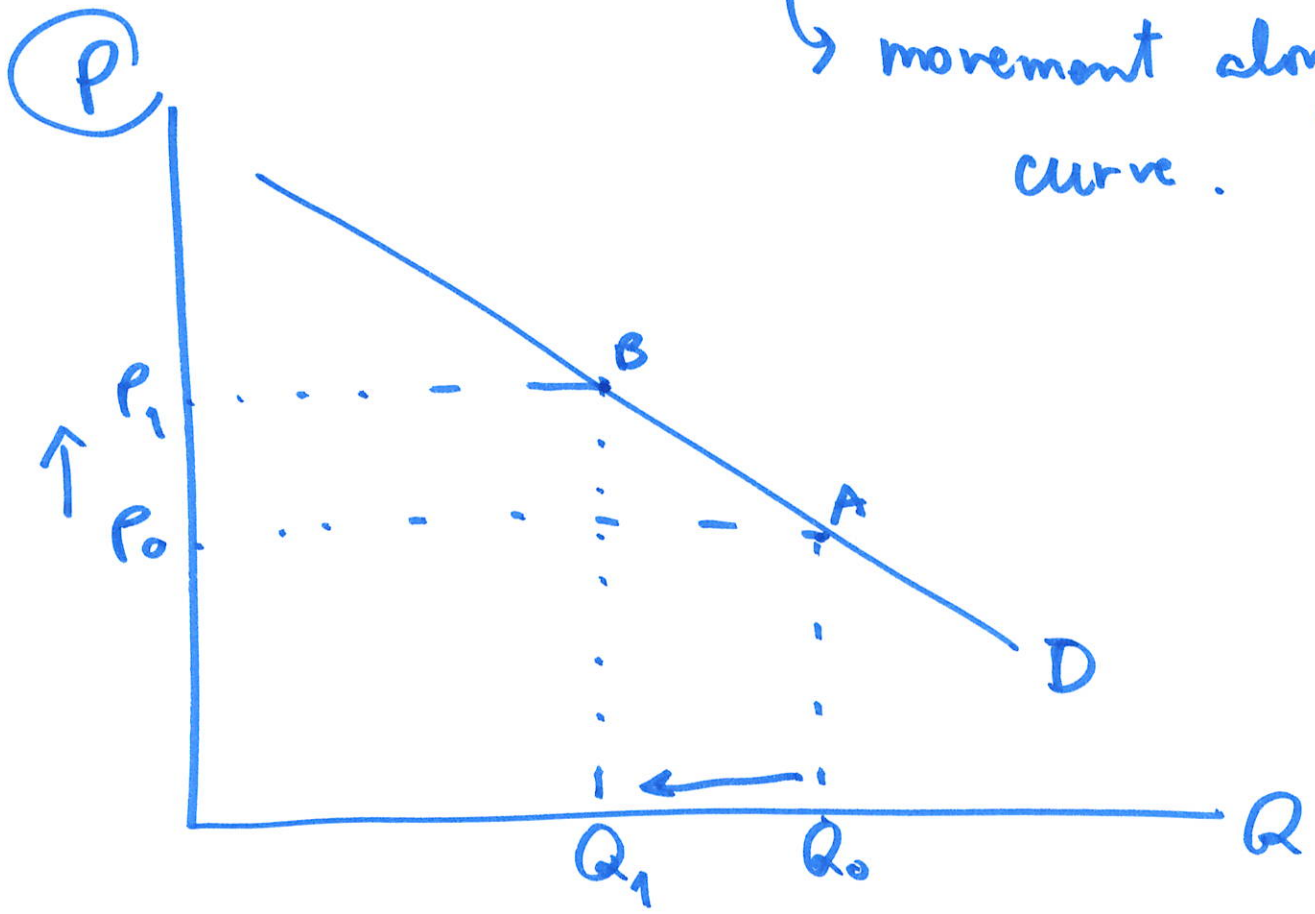
- Price of the good → Change along the demand curve: P↑ ⇒ Qd↓

- Income
- Price of other related goods
  - Substitutes
  - Complements
- Expectations
- Taste.

} Demand "Shifters"

Impact of price change on demand

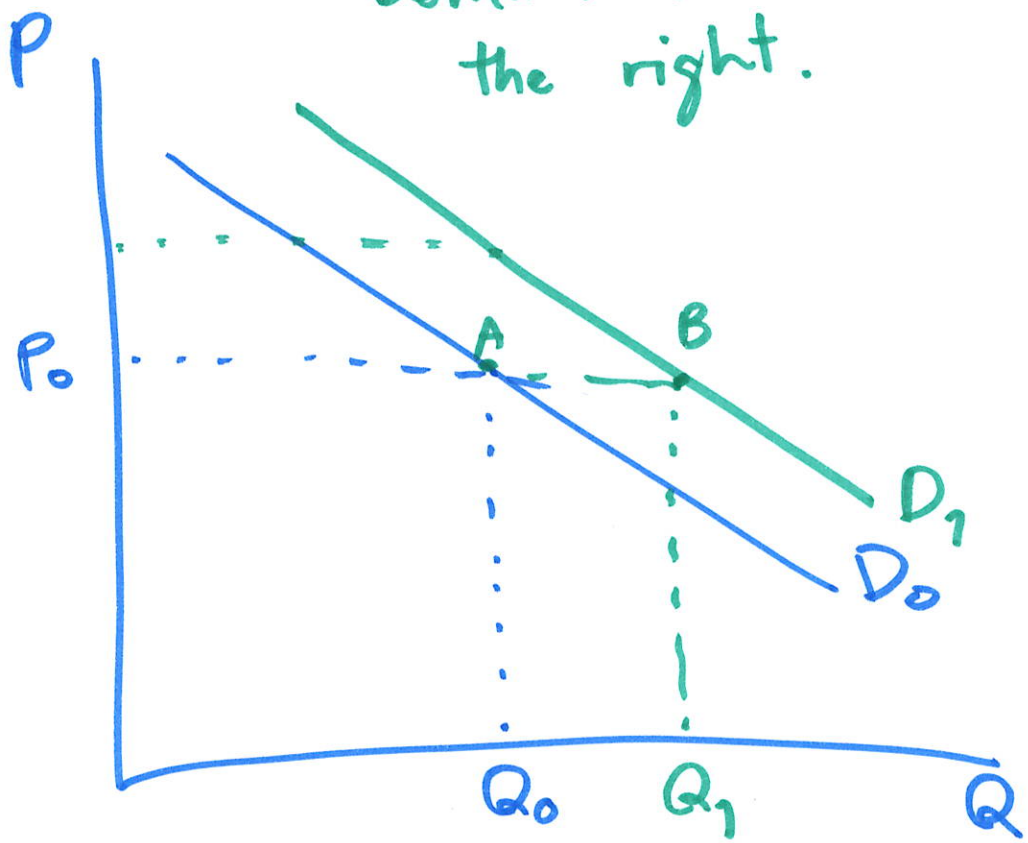
↳ movement along demand curve.



Impact of income change

Suppose income increases.

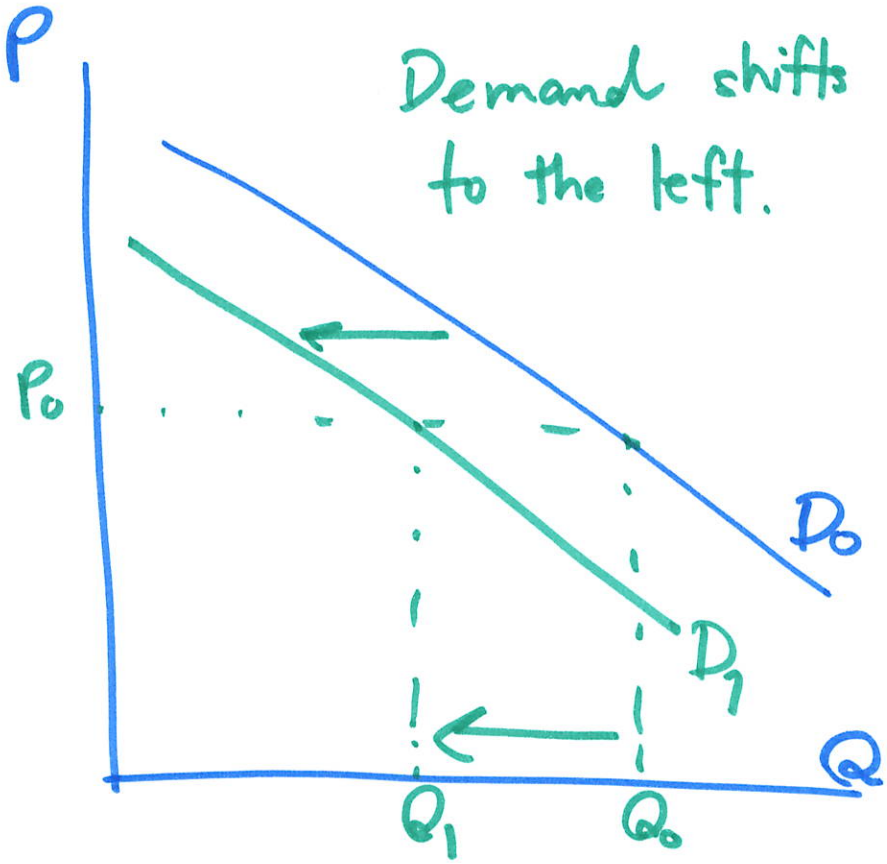
Demand shifts to the right.



"Normal goods"

↳ I ↑ ⇒ Q_d ↑

Demand shifts to the left.



"Inferior goods"

↳ instant noodles, potatoes

I ↑ ⇒ Q_d ↓

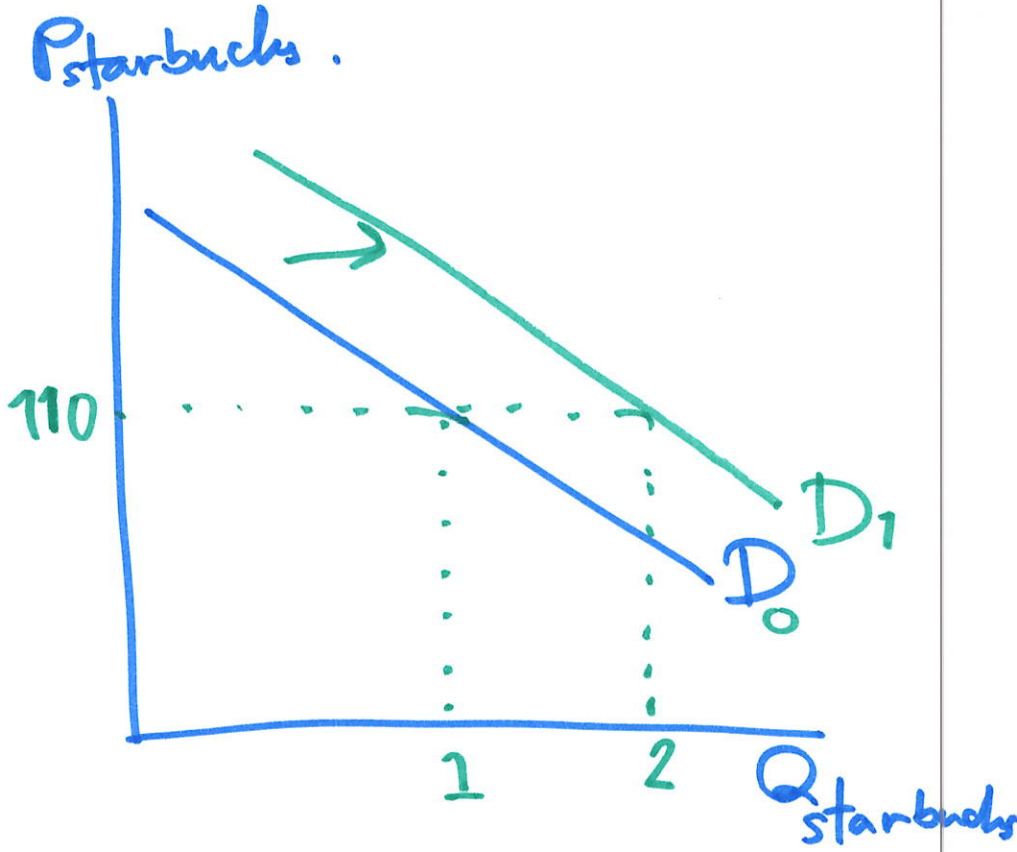
Price of related goods changes

Substitutes

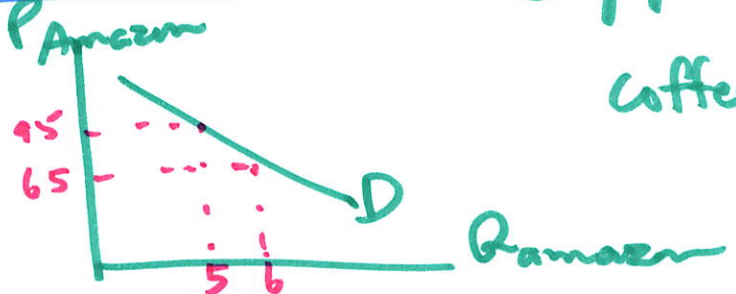
- Starbucks & Amazon coffee
- Coke & Pepsi
- Ipad & Sumsung tablet
- Iphone & Huawei

Price of substitutes ↑

⇒ demand shifts right



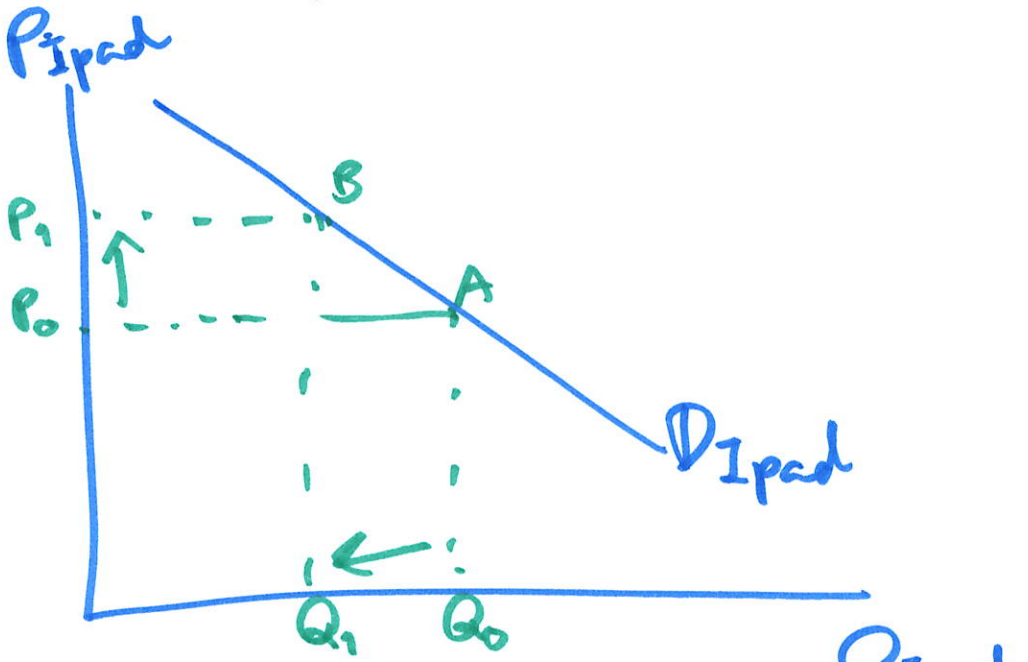
Suppose price of Amazon coffee increases.



Complements - goods that are consumed together.

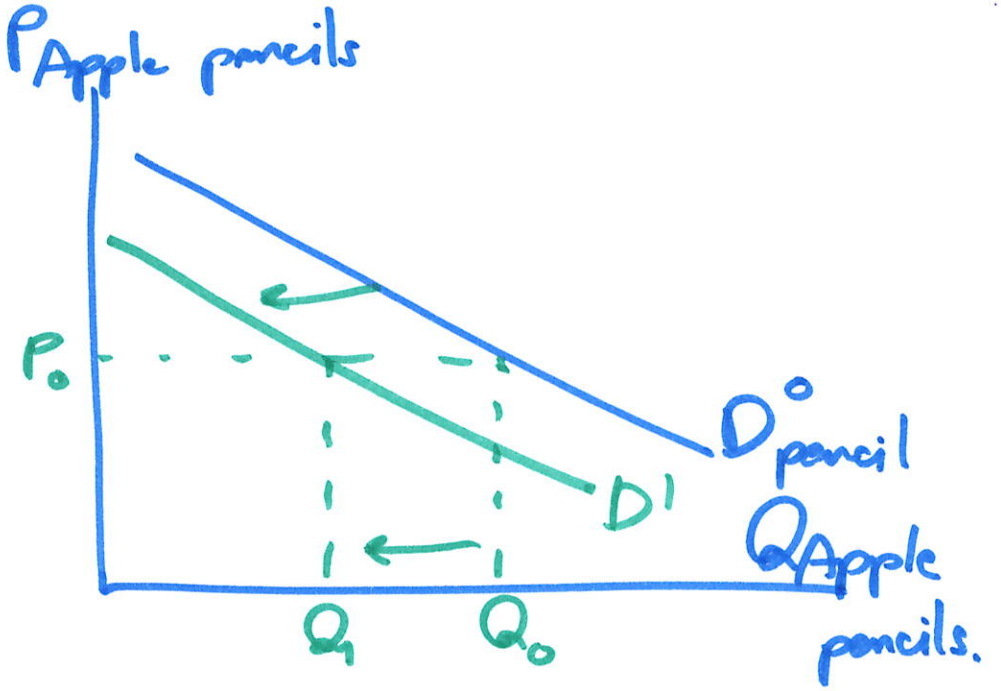
- Ipad & Apple pencil.
- Soft drink & fast food.

Ipad



Price of Ipad increases.

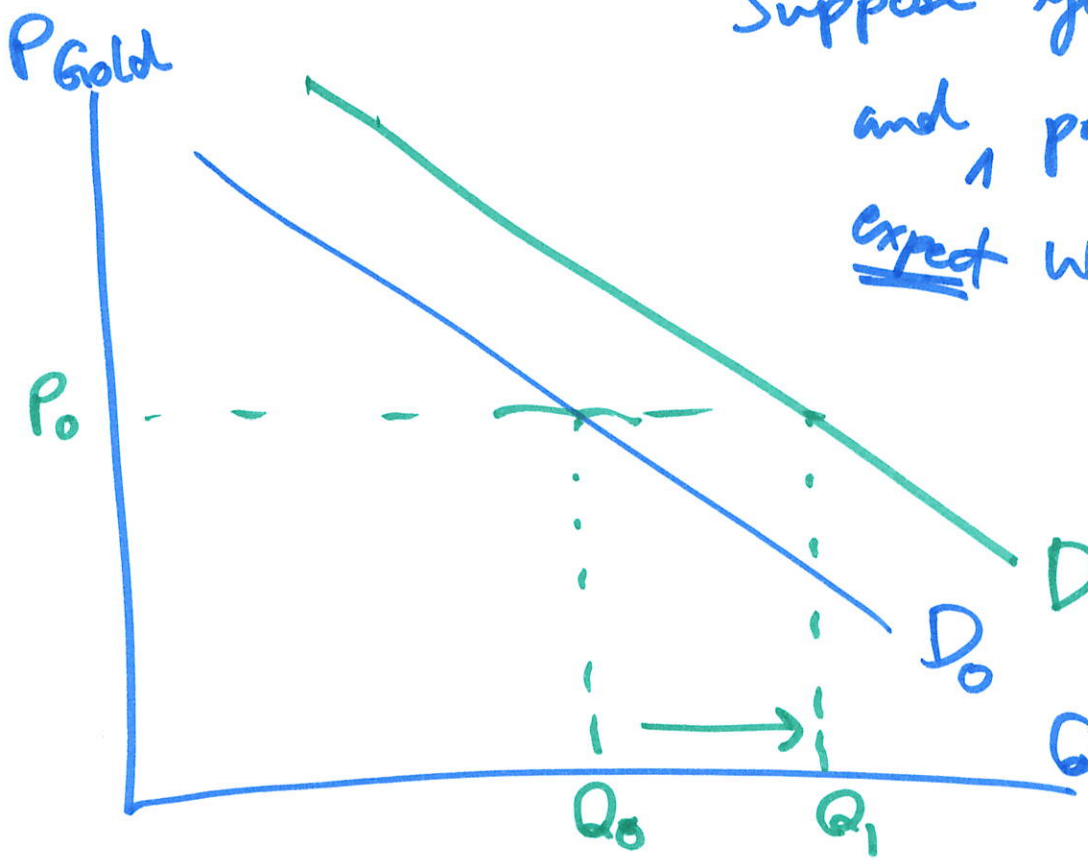
Apple pencils



⇒ shift demand for Apple Pencil to the left.

Impact of Expectation

$E(P) = P_n^1(r_1) + P_n^2(r_2)$ ⑥

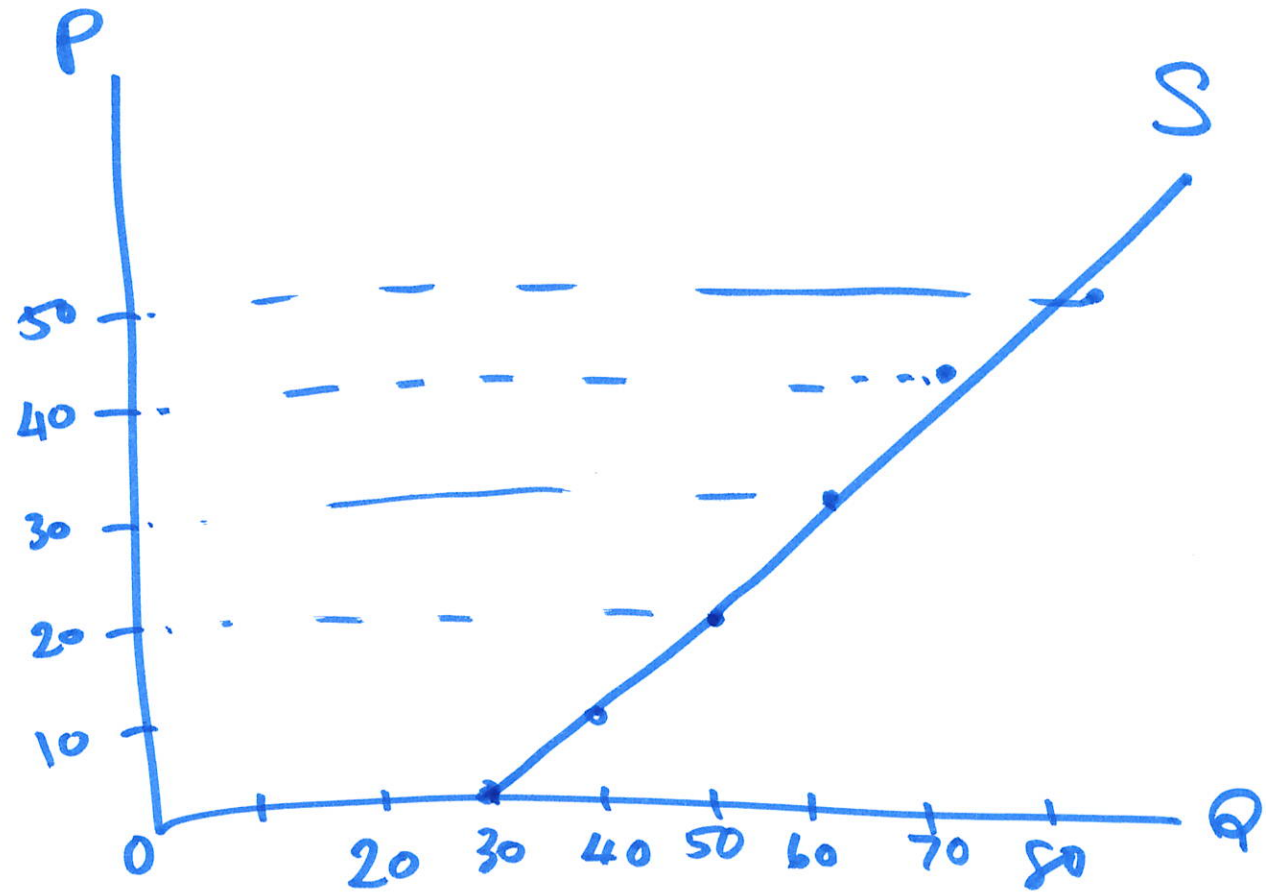


Suppose you expect interest rate to go down and price of gold to go up.

Expect what happens to D for gold?

Example of Supply Curve

P	Q
0	30
10	40
20	50
30	60
40	70
50	80



Suppose there are 3 identical sellers whose supply curve is: $P = -3 + 2q$. (q = quantity supplied by each firm).

What is the market supply curve?

Individual firm's supply

$$P = -3 + 2q$$

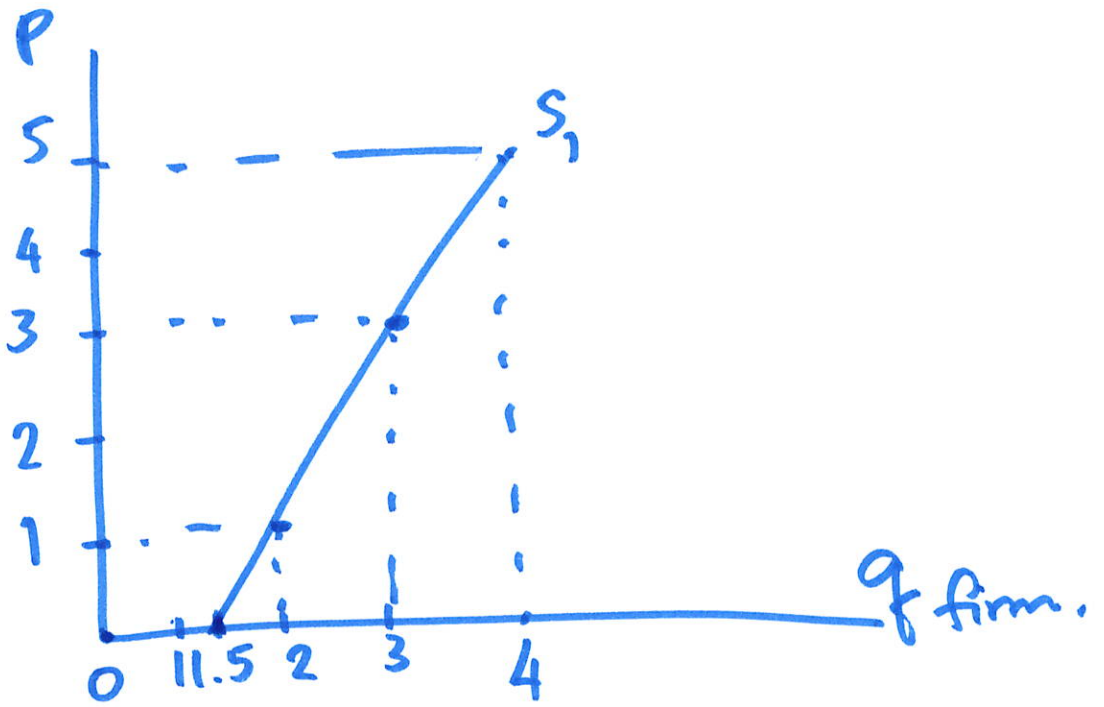
$$P + 3 = 2q$$

$$q = \frac{P+3}{2}$$

$P = 0 \rightarrow q = 1.5$

$P = 1 \rightarrow q = 2$

$P = 3 \rightarrow q = 3$



Market supply

$P = 0 \Rightarrow Q_m^s = 3 \times 1.5 = 4.5$ units

$P = 1 \Rightarrow Q_m^s = 3 \times 2 = 6$ units

$P = 3 \Rightarrow Q_m^s = 3 \times 3 = 9$ units

$P = 5 \Rightarrow Q_m^s = 3 \times 4 = 12$ units.

$$Q_m^s = \sum_{i=1}^{3} q_i$$

$$= 3\left(\frac{P+3}{2}\right)$$

$$Q_m^s = \frac{3}{2}P + \frac{9}{2}$$

$$Q_m^s = 1.5P + 4.5$$

Inverse f^n.

$$2Q_m^s = 3P + 9$$

$$3P = 2Q_m^s - 9$$

$$P = \frac{2}{3}Q_m^s - 3$$

Market Supply function.