↳ Labour:

→ The aggregate of all human physical and mental effort in the creation of goods and services.

→ Primary factor of production.

↳ Differential treatment:

→ Different ppl earn different units (wages)

→ Prices paid to workers, land owners and capital owners depend on supply & demand for labour, land & capital respectively.

→ Wages are paid depending on supply & demand. → [Wage determination factors in competitive markets]

↳ Derived demand:

→ The demand for a factor of production is derived from the firm's decision to sell the good in another market.

↳ Profit Maximisation

- Aim: To maximise profits
- Ignores time value of money
- Ignores risk and uncertainty
- Ignores timing of return
- Long-term

Wealth Maximisation

Aim: To attain max. market value of goods in the stock.

→ does not ignore.

Short-term.

→ Production function:
establishes relationship b/w input to produce goods & services and o/p of goods & services produced.

↳ MPL: (to decide how many workers a firm can hire)
→ Marginal product of labour (also → MPP → Marginal Physical Product of labour)
→ Change in amt. of o/p by just an additional unit of i/p.
→ Also includes physical capital & labour already in use.

Eg:

Labour (L)	o/p Quantity (Q)	MPL in (bushels) $= \frac{\Delta Q}{\Delta L}$	Value of MPL VMPL (Revenue) (in $)	Wage ($)	Profit = VMPL − Wage
0	0				
		100	1000	500	500
1	100				
		80/1 = 80	800	500	300
2	180				
		= 60	600	500	100
3	240				
		= 40	400	500	−100
4	280				

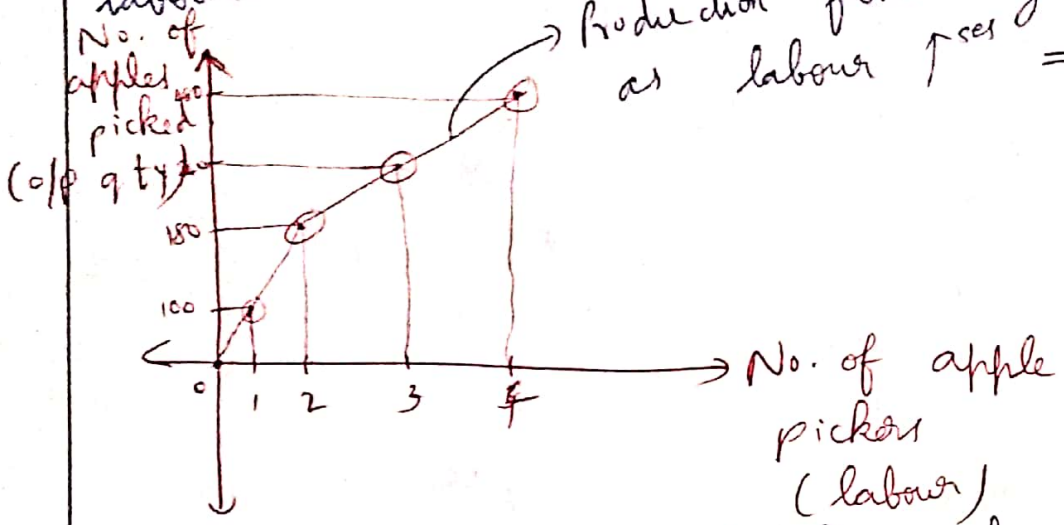
As no. of labours (i/ps) ↑ses the property, profit ↓ses where (law of diminishing) Diminishing marginal product → MPL ∝ 1 / i/p qty [only in short-run]
qty of i/p ↑ses.

MPL ↓ses as labor ↑.

VMPL (marginal revenue product) = MPL × Cost of 1 bushel ($10). → Market price of 1 o/p → constant in competitive markets.

Labour ↑ses ⇒ Q ↑ses (o/p)

MPL → slope of graph of o/p qty vs labour.



Profit from an additional worker = Worker's contribution to o/p − worker's wage.

(revenue) → = VMPL.

↳ ~~Rev~~ Revenue due to an additional unit of labor.

No. of workers firm hires = until when firm gets profit.

Here, no. of workers(L) > 3 ⇒ profit is -ve.
Unprofitable for the firm ⇒ hires ONLY 3 workers.

↳ Marginal Revenue product of labour (MRP):

→ The extra revenue a firm gains by employing an additional unit of labour.

→ depends on → productivity of worker.
→ MR (Marginal Revenue) of the last good sold.

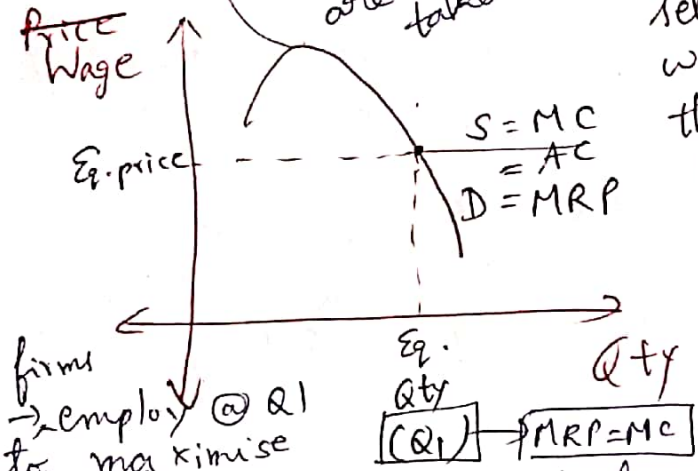
↳ Demand for labour → how many workers a firm must hire depends on the following factors:

→ more ⇒ ↑ o/p ⇒ ↑ Labour ⇒ ↑ demand for labour.

- → Demand for the good based on which price & MR of last good sold are decided.
- → MPL or MRP (until a firm is not unprofitable)
- → VMPL or Marginal cost (MC)

Collection of firms → industry.

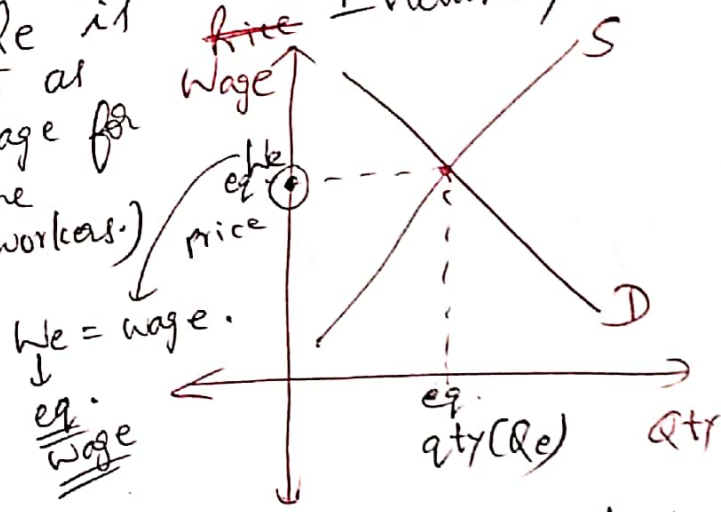
↳ Wage determination in perfectly competetive markets: → elastic as firms are wage takers.



firms → employ @ Q1 to maximise profit.

→ Wage of an individual firm → determined by S and D → Supply curve is perfectly elastic, D = MRP @ Q1.

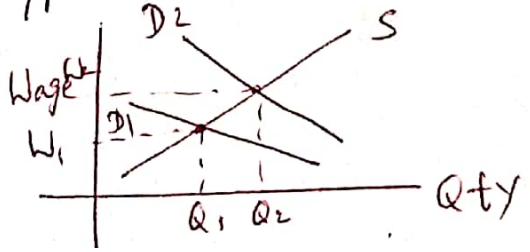
(Wage corresponding ⟸ to Qe is set as wage for the workers.)



→ Wage determined by supply & demand.

↳ Higher wages ⇒ encourages workers to supply ↑ o/p. S → positive slope.

↳



D2 – more wage (W2) → ↑ MRP.

D1 – less wage (W1) → ↓ MRP.

Wage ∝ MRP

↳ When there is a rise in wages

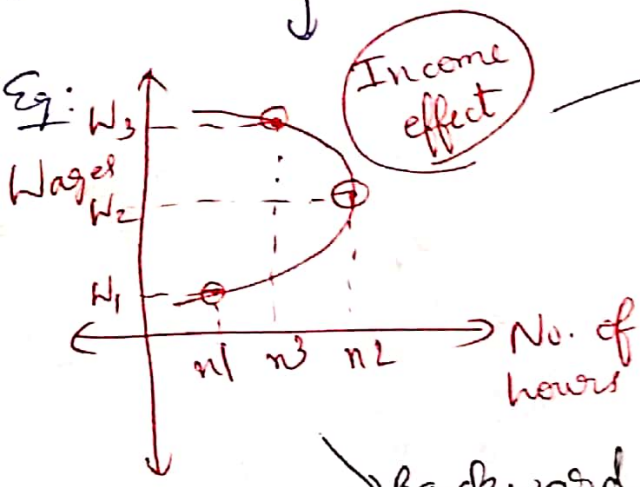
Income effect

↳ workers are paid less when they work for ↑ hrs ⇒ workers work only for ↓ hrs. Even when wages ↑, workers work for ↓ hours.

Substitution effect

↳ workers are paid ↑ when they work for ↑ hours ⇒ opportunity cost of leisure ↑ses ⇒ workers work ↑ hrs.

↓

Eg: 

→ workers work for n3 hrs ($n3 < n2$) ⇒ earn $W3 > W2$. So, they work only for ↓ hrs as in ↓ working time they earn ↑ wage.

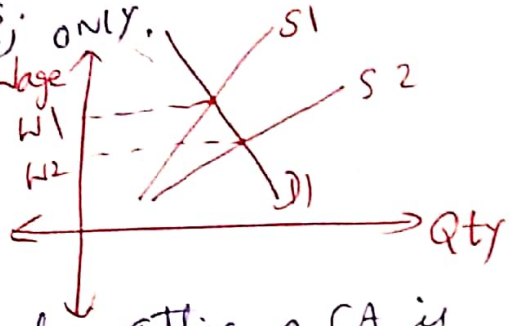
↳ Backward sloping of supply.

↳ Market supply of labour depends on:

- → The number of qualified workers (people): No. of qualified CA's ↓ ⇒ supply curve is inelastic ⇒ ↑ wage
- → Difficulty of getting a qualification → ↑ ⇒ supply curve is inelastic. ⇒ ↑ wage
- → Non-wage benefits of a job → has low-skilled workers who are paid low.
- → Wages & condition of other jobs

↳ Features of a perfectly competitive labour market: → firms are wage takers as wage ↓ ⇒ workers wont accept it.
- ↳ Many firms
- ↳ Many workers with the same skills.
- ↳ Perfect info about wages & job cond^{n}s
- ↳ Firms offering same jobs only.
- ↳ Firms set equilibrium wage (We)

Supply curve is inelastic ⇒



S2 → elastic

S1 → inelastic ⇒ W1 > W2

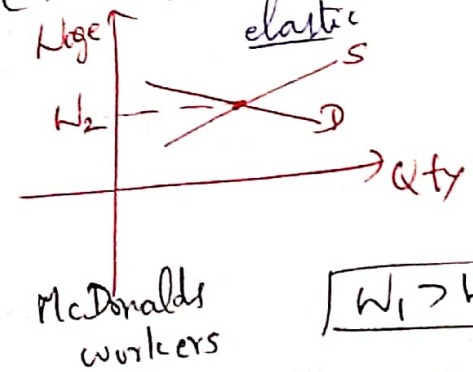
↳ No. of CAs ↓ ∆ Difficulty of getting a CA is more ⇒ CAs' wage should be more.

↳ Lawyers are paid more than McDonalds workers because:

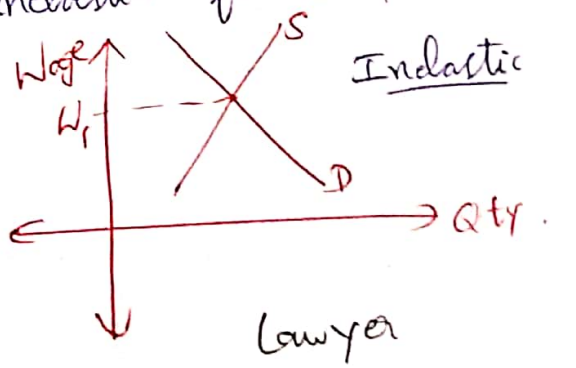
(i) Getting a qualification for lawyer is harder.

(ii) MRP for firm ↑ when lawyers are successful.

(iii) Supply curve is inelastic for lawyers.



$W_1 > W_2$



Qualification for McDonalds worker → is ∞ ↓ ⇒ wage ↓.