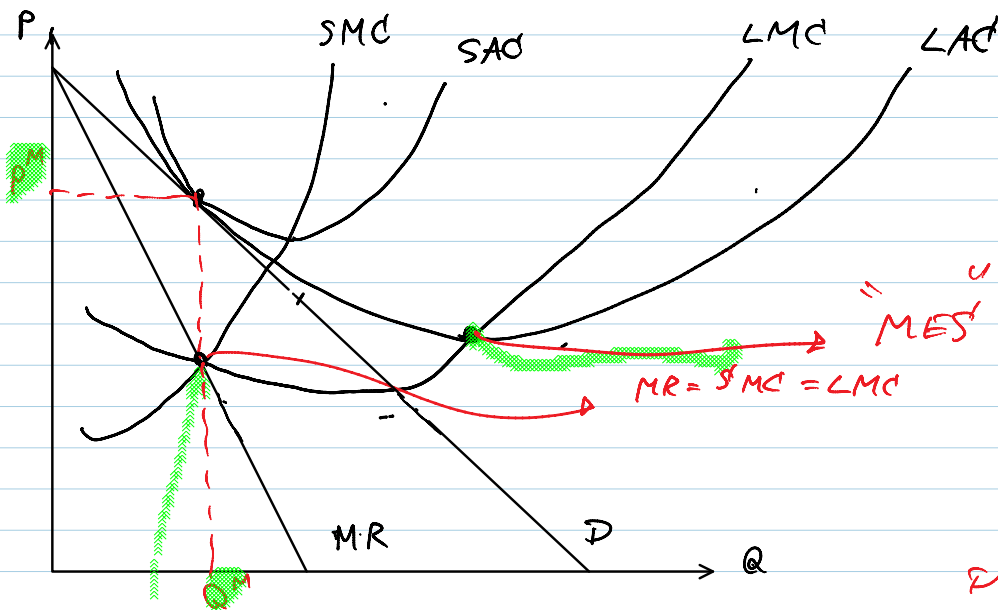
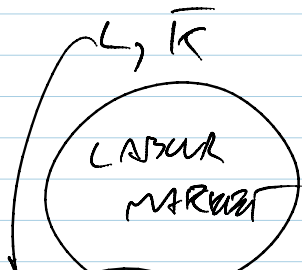


LONG RUN EQUILIBRIUM FOR MONOPOLY

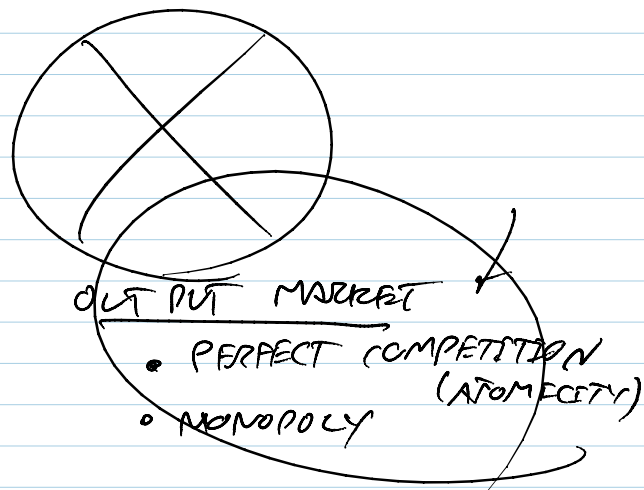


- IN THE LONG RUN, MONOPOLIST CAN EARN ZERO ECONOMIC PROFIT (AS SHOWN IN THE GRAPH) OR POSITIVE ECONOMIC PROFITS.
- IT CHOOSES TO PRODUCE AT Q WHERE $MR = SMC = LMC$
- IT IS **NOT** NECESSARY FOR A MONOPOLIST TO PRODUCE AT THE QUANTITY IN WHICH LAC IS MINIMIZED.

FACTOR MARKETS



- FACTOR MARKET
- PERFECTLY COMPETITIVE FACTOR MARKET
 - MONOPSONY (ONLY ONE BUYER OF AN INPUT IN A GIVEN MARKET)



- OLIGOPOLY MARKET
- PERFECT COMPETITION (ATOMISTICITY)
 - MONOPOLY

(ONLY ONE BUYER OF AN INPUT IN A GIVEN MARKET)

LABOUR AS PERFECT DEMAND

↓ HOW MANY WORKERS TO HIRE?

- PRICE OF OUTPUT
- PRICE OF LABOR (w)

Q: TO MAXIMIZE THE FIRM'S PROFIT, HOW MANY WORKERS THE FIRM SHOULD EMPLOY?

- ASSUMPTION**
- ① GOOD MARKET (OUTPUT MARKET) : PERFECTLY COMPETITIVE
 - ② FACTOR MARKET (LABOR MARKET) : PERFECTLY COMPETITIVE
 SUPPOSE K IS FIXED
 • LARGE NUMBER OF WORKERS
 • LARGE NUMBER OF BUYERS OF LABOR INPUTS

↓
IMPLICATION?

• MARGINAL PRODUCT OF LABOR (MP_L)

$$= \frac{\Delta Q}{\Delta L}$$

• MARGINAL REVENUE PRODUCT OF LABOR (MRP_L)

$$MRP_L = MR \times MP_L$$

↓
BAIT/TIME PERIOD

SUPPOSE $MP_L = 6$ PIECES OF COOKIE

$MR = 10$ BAIT/PIECE

$MRP_L = 10 \times 6 = 60$ BAIT/TIME PERIOD!

NOTE THAT IN PD MARKET : $MR = P$

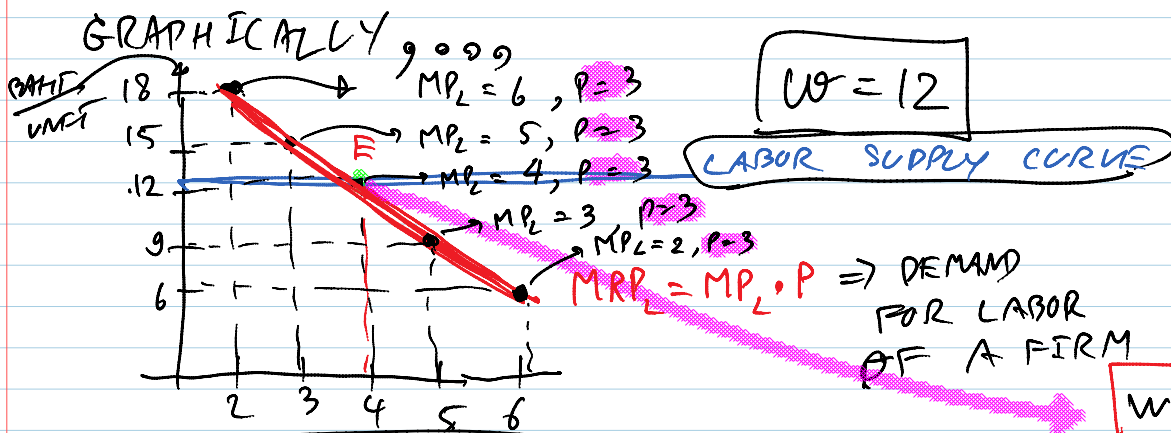
SO

$$MRP_L = MR \times MP_L = P \times MP_L = \underbrace{VMP_L}_{\text{VALUE OF MARGINAL PRODUCT OF LABOUR}}$$

VALUE OF MARGINAL PRODUCT OF LABOUR

PROFIT-MAXIMIZED & CONDITION FOR HIRING

- IF VMP_L OR $MRP_L > W \Rightarrow$ HIRE ADDITIONAL WORKER
- IF VMP_L OR $MRP_L < W \Rightarrow$ REDUCE WORKER
- IF VMP_L OR $MRP_L = W \Rightarrow$ WORKER PROFIT-MAXIMIZING LEVEL IS REACHED



L	MP_L	MRP_L	Q
1	7	18	13
2	6	18	18
3	5	15	22
4	4	12	25
5	3	9	27
6	2	6	

