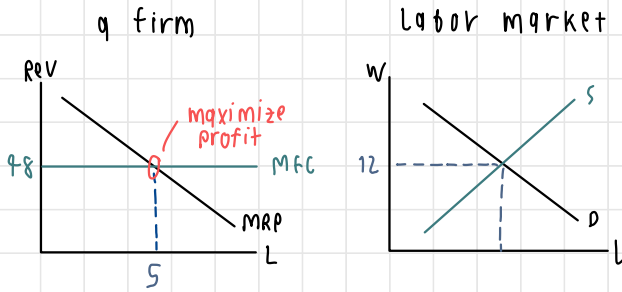


## assignment 3

1. a)



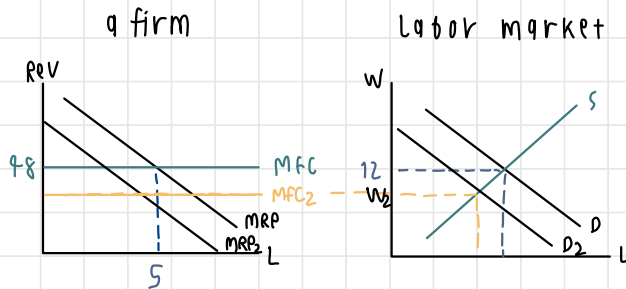
$$P = MR = 12$$

$$MRP = MR \times MP$$

$$48 = 12 \times MP$$

$$MP = 4 \longrightarrow \text{unit of labor} = 5 \times$$

b)



in product market

economic recession effect demand  $\downarrow$  to shift left. thus, MRP shift left as the drop in total revenue and quality of product. firm demand less labor (D to  $D_2$ ). Eventually, wage decrease to  $w_2$ .

2. a) Lerner's index :  $L_A = \frac{P - MC}{P} = \frac{1 - 0.2}{1} = 0.8$
- b) HHI index for industry =  $\sum_{i=1}^N s_i^2 = (0.5)^2 + (0.2)^2 + (0.3)^2$
- $$= 2.5 + 0.4 + 0.9$$
- $$= 3.8 \times$$
- c) D and T merge their company =  $\sum_{i=1}^N s_i^2 = (0.5)^2 + (0.5)^2$
- $$= 5 \times$$

- 3
- a) market power because firm has ability to raise the price up
  - b) externalities because it is the cost that affect the third party (Morpheus) who didn't choose to incur that cost
  - c) adverse selection because a firm gave her a probation period in order to know more about her ability
  - d) earthquake alarming system is non-excludable and non-rivalrous so it is a public goods
  - e) not a market failure