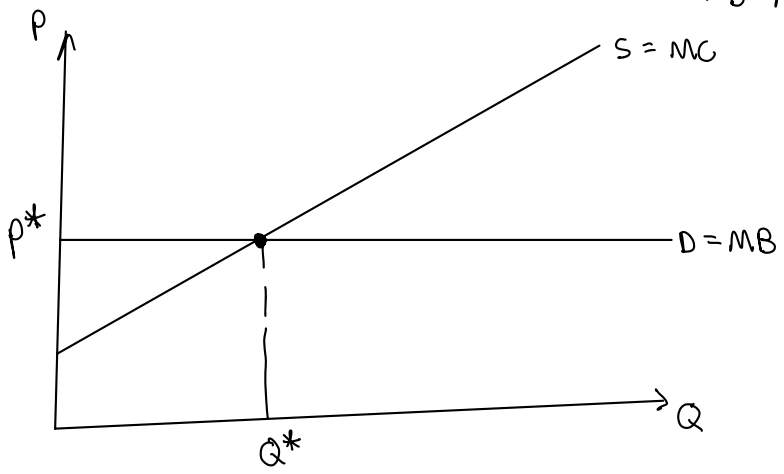
ECON 101

TA Worksheet, Module 12 (Market Structure)

Name:_____ TA:_____

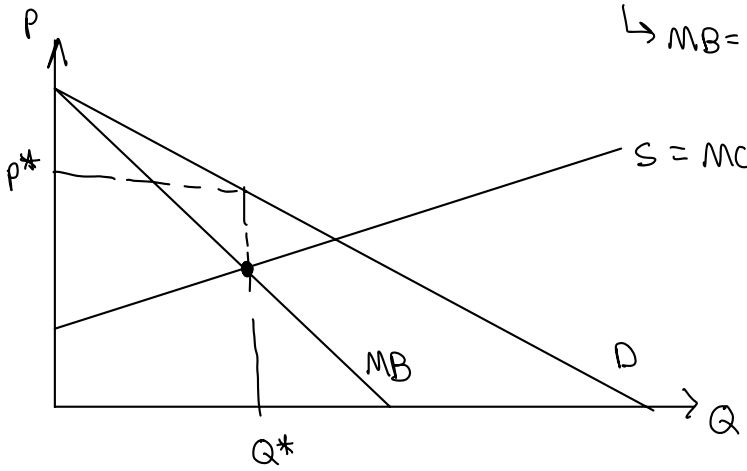
1. Draw a perfectly competitive firm (demand and cost curves). Show the profit maximizing quantity.

MB = MC



2. Draw a picture of a firm with market power. Show the profit maximizing price and quantity.

↳ MB = MC



3. Give an example of an oligopolistic industry. How do you think firms compete in that industry? (just price? Quality? Product differentiation?) Do you think they collude at all?

cereal aisle (main big brands)
→ compete mostly on product differentiation

airlines
→ compete on all 3

4. Explain why Marginal Revenue equals price for a firm in perfect competition but MR<P for a firm with market power.

PC: price doesn't change $\Rightarrow \frac{\Delta TR}{\Delta Q} = P = MR$

mkt pwr: price $\downarrow \Rightarrow \frac{\Delta TR}{\Delta Q} = P_2$ - discount effect

$$MR = P_2 - \frac{(P_1 - P_2)Q_1}{\Delta Q}$$

5. Consider this firm's demand schedule. What is the marginal revenue for Q=4?

Price	Quantity	TR	MR
12	2	24	–
10	3	30	6
8	4	32	2
6	5	30	-2

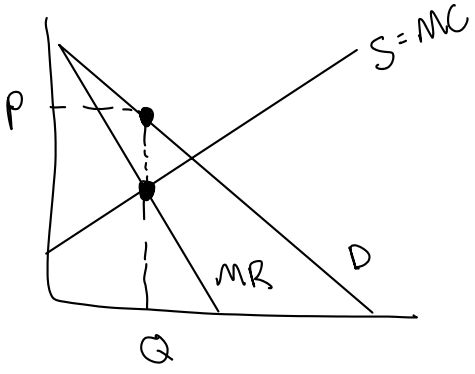
TR = P(Q)

MR at Q = 4 = 2

6. Explain how market power is related to the slope of the demand curve.

steeper slope → more mkt pwr

7. Suppose: MC=2Q
Demand: P=120-Q/2 (so MR=120-Q)
What is the profit maximizing P and Q for the firm?



MC = MR

2Q = 120 - Q

3Q = 120

Q* = 40

P = 120 - Q/2

= 120 - 40/2

= 120 - 20

P* = 100