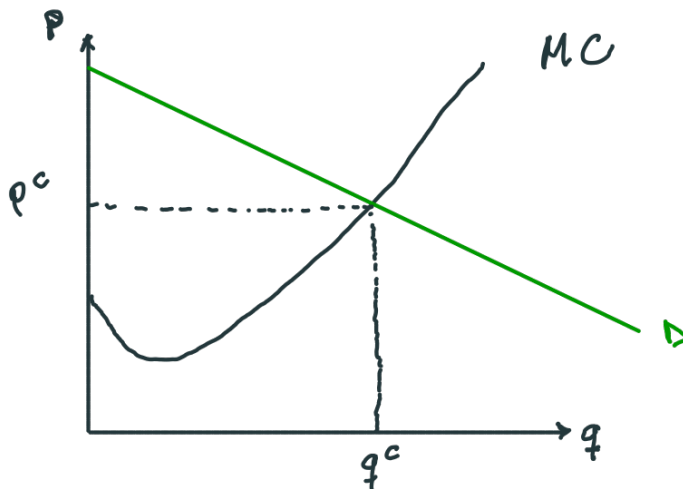# ECON 101
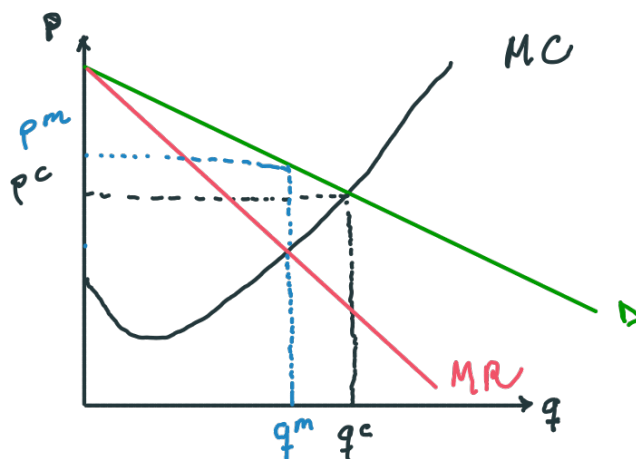# TA Worksheet, Module 12 (Market Structure)

Name:_____   Date:_____

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

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

1. Set MR = MC
2. Get q
3. Plug q into D and get p^m.

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?

Gas. Price mainly, as it's almost an homogeneous product. Price Elasticity for gas is Super high (~ 20%). Easy market to have collusion.
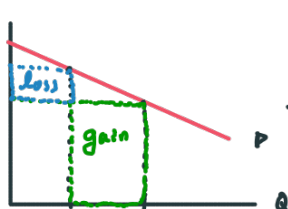
4. Explain why Marginal Revenue equals price for a firm in perfect competition but MR<P for a firm with market power.

Perfect. Competition: firm is a ~~price~~ taker, the MR is the P. that is, selling another unit will yield MR=P as P is fixed.

Market Power: faces Downward demand. To sell more, must lower P.
↳ the effect is:

trade-off between increasing q but lowering P on all units sold.

MR = P + (Loss)

Firm w/ market power sets P.

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

Price	Quantity	Revenue	MR
12	2	24	?
10	3	30	6
8	4	32	2
6	5	30	-2

$Q=4$ has $MR=2$

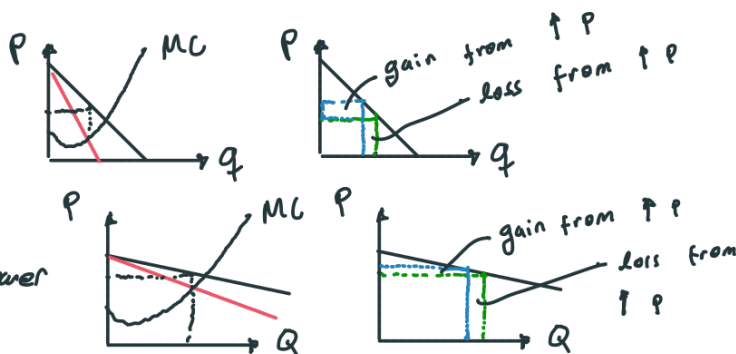6. Explain how market power is related to the slope of the demand curve.

The flatter the demand curve, the more Price elastic is the demand.

Highly elastic demand
   - less prone to market power
Low elasticity / inelastic
   - more prone to market power

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

1. SET   MC = MR
2. GET   q
3. Plug q in D to get P

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1. $2Q = 120 - Q$
2. $Q = 40$

3. $P = 120 - \frac{40}{2}$
   $P = 100$

Solution:

$(P^*, Q^*) = (100, 40)$

Revenue is 4000