

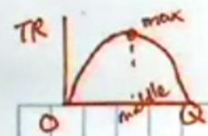
Revenue for the Monopolist

- Supplies the market demand; downward-sloping (Law of demand)
- To sell more: must lower the price on all units sold
- Total Revenue $TR = P \times Q$
- Average Revenue $AR = TR / Q$
 - **For monopolist: $P = AR$**
- Demand Curve = average revenue curve
- **To make decisions we compare marginal revenue to marginal cost**
- **Cost Curves are to do with resources not to do with the number of firms selling the final product**

Example of some linear demand curve

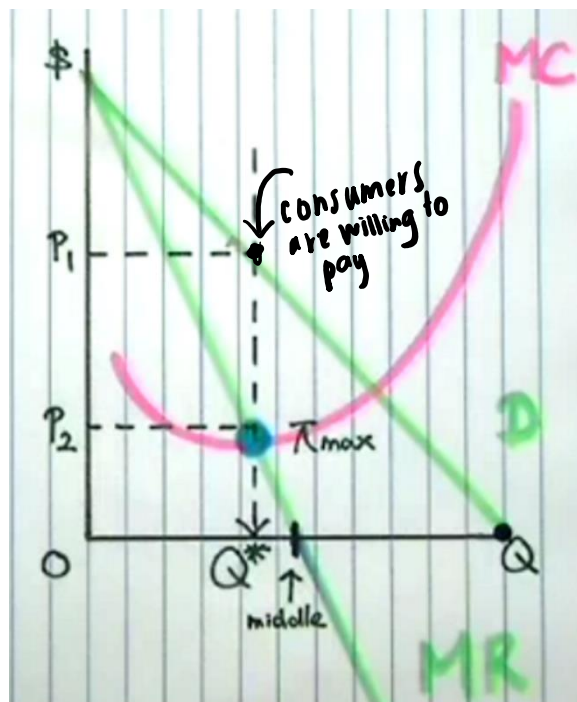
Our aim is to calculate the Marginal Revenue because the profit maximising rule is $MR = MC$

- **In conclusion, price is bigger than marginal revenue in a Monopoly $P > MR$.** Marginal revenue always goes down. Negative marginal revenue means your total revenue is going down
- In perfect competition they are however equal $P = MR$
- The reason the price $> MR$ is because if you want to sell more you need to put the price down
- $MR < P$ in a Monopoly
- Marginal Revenue is twice as steep as the demand curve



$MR = \frac{\Delta TR}{\Delta Q}$

P	Q	TR (P x Q)	MR
20	0	0	
18	1	18	18
16	2	32	14
14	3	42	10
12	4	48	6
10	5	50	2
8	6	48	-2
6	7	42	-6
4	8	32	-10
2	9	18	-14
0	10	0	-18



- Should the firm charge price at P_1 or P_2 and which can they get away with?
 - P_1 is better because it is higher. The firm can get away from charging the price at P_1 because it intersects at the demand curve where consumers are willing to pay
 - The price is always read off the demand curve because that is when consumers are willing and able to pay

Cost and Profit Maximisation

- Monopolist: choose the price or the quantity
- Firm with some power to set the price
- Demand curve for its output slopes downward
- Profit Maximisation
 - Profit = Total Revenue – Total Cost
 - Supply the quantity where total revenue exceeds total costs by the greatest amount

Model of a Monopoly (Diagram) if making Economic Profit [Short Run]

1. Start with drawing the **demand curve** because the demand curve is different for each market structure
2. The **Marginal Revenue** Curve MR is next because it is **twice as steep at the demand curve** as shown below
3. Next is **Marginal Cost** because the profit maximising rule is $MR = MC$
4. Mark the **Profit Maximising Point** because that is where $MR = MC$
5. Draw a vertical line through the Profit Maximising Point
6. The Vertical line tells you where **The Profit Maximising Quantity (Q^*)** is on the graph
7. The Vertical Line also tells you where **The Profit Maximising Price (P^*)** on the Demand curve because it shows the consumer's willingness and ability to pay
8. If the Firm is making a profit, **draw the Average Total Cost ATC** below the price as shown on graph. If the firm is making a loss, draw the ATC above the price
9. To **calculate Profit, you need to know $P - ATC \times Q$** . Our aim is to find what is the ATC at Q^* , for that you look at the vertical line since that is where ATC meets Q^*
10. $P - ATC \times Q$ will give you your Economic Profit (Supernormal Profit)

Note: a common mistake in the exam is marking the price where the Mr curve is and marking the ATC where the minimum ATC is. We are producing where $MR = ATC$ not the Minimum ATC as its aim is to maximise its profits not to minimise cost

