

Key Topic: Monopolies and Marginal Revenue

Marginal revenue: Additional revenue coming in for each additional unit we decide to sell.

Keep selling units as long as the Marginal Revenue \geq Marginal Cost

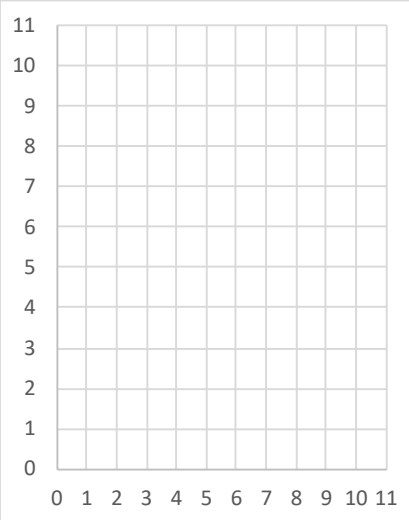
Pure Competition: Price Taker: we assume that they are so small that they can sell as many as they like at the market price. So, for each additional unit sold, the additional revenue = the market price.

MR=P

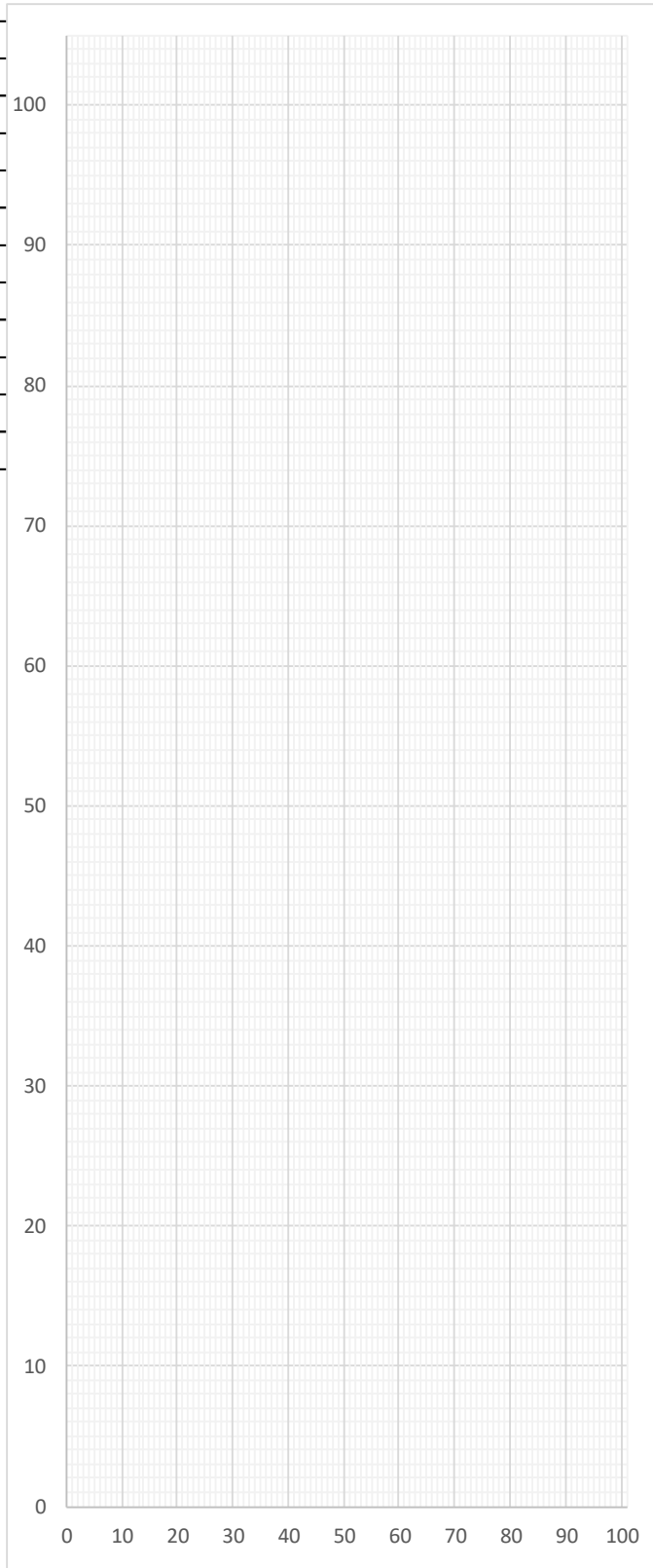
Monopoly: Price Maker: The ONLY supplier. So, the only way to sell another unit is to lower you price for ALL units. (There are other complicated ways that are theoretically possible: Price discrimination).

Assuming the monopoly sells to everyone for the same price , let's investigate marginal revenue.

Suppose the demand curve is $P=10-Q$



Q	P	TR	MR
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			



Suppose the demand curve is $P=102-2Q$

Q	P	TR	MR
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			



Monopolies: So, if Demand is a straight line, then for a Monopolist Marginal Revenue a line with twice its slope



Reason 1: You saw it when we calculated MR by hand. For each \$1 you lower price, MR drops by \$2.

Reason 2: Calculus doesn't lie!

Calculus: A derivative is a SLOPE, or rate of change. A derivative takes a TOTAL function and makes a MARGINAL function. (NO calculus on the test, it is just the easiest way to see this)

Total Revenue = Price * Quantity

If $P=102-2Q$, then Total Revenue = _____

Then Marginal Revenue = _____

If $P=500-6Q$, then Total Revenue = _____

Then Marginal Revenue = _____

If $P=a-bQ$, then Total Revenue = _____

Then Marginal Revenue = _____

To sum up:

In Pure Competition, Marginal Revenue is the Market Price

One small firm can sell as much as they want at the market price

In Monopoly, Marginal Revenue drops fast, twice as steep as the demand line.

A monopoly can't sell more unless it cuts its price!

Perfect Competition:

Produce as long as $MR=P \geq MC$

Monopoly: Produce as long as $MR \geq MC$

Then charge the highest price people will pay for that Q

