ECON 101

TA Worksheet, Module 3 (Supply)

Name:_____ TA:_____

1. Why does the supply curve slope up? (hint: marginal product and marginal cost)

As QS ↑, MP ↓ (due to capacity constraints, technological wear, etc) so MC ↑. Firms act according to rational rule + sell where MB = MC. In perfect competition MB = P so higher MC requires higher P so ↑Q => ↓MP => ↑MC => ↑P

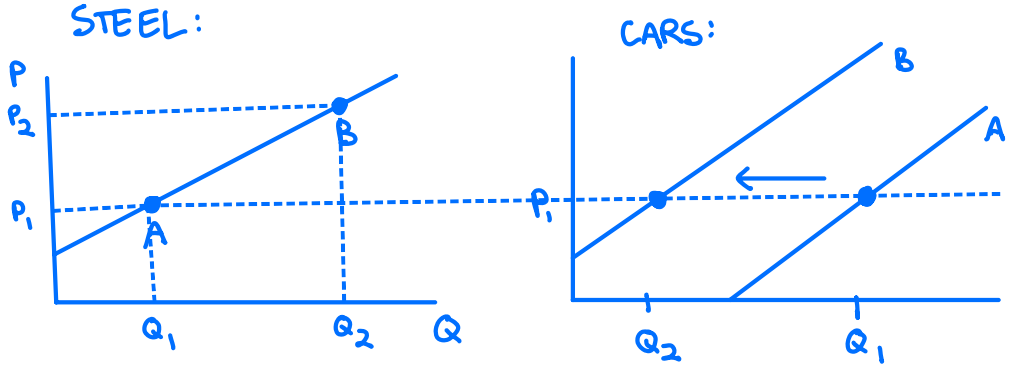
2. You run a sandwich shop. Suppose your rent (which is a fixed cost) rises. How does that affect how many sandwiches you want to sell? Why?

It does NOT affect how many sandwiches I want to sell.

As a rational firm, I make decisions according to the marginal principle + rational rule such that I want to sell another sandwich until MB = MC.

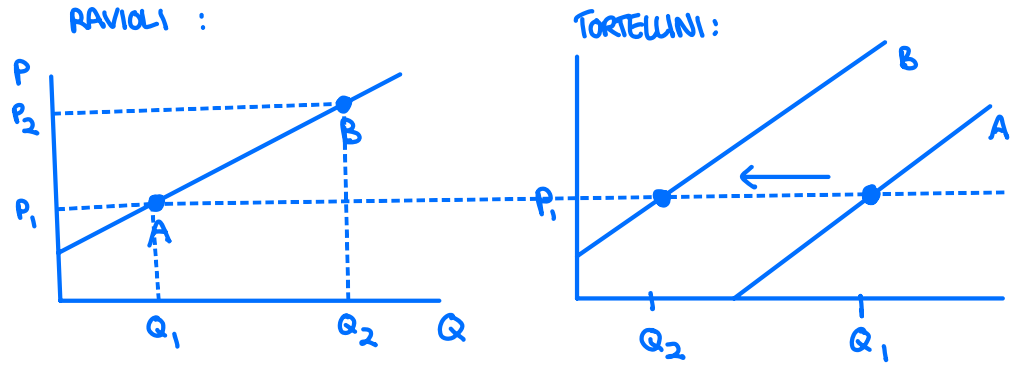
$MC = \frac{\Delta TC}{\Delta Q}$ => fixed costs do not enter MC; only variable costs.

3. Show (on a graph) how a rise in the price of steel affects the supply of cars. Label everything.



steel, a required good to manufacture cars, has become more expensive, so MC ↑ so Q ↓ at every price

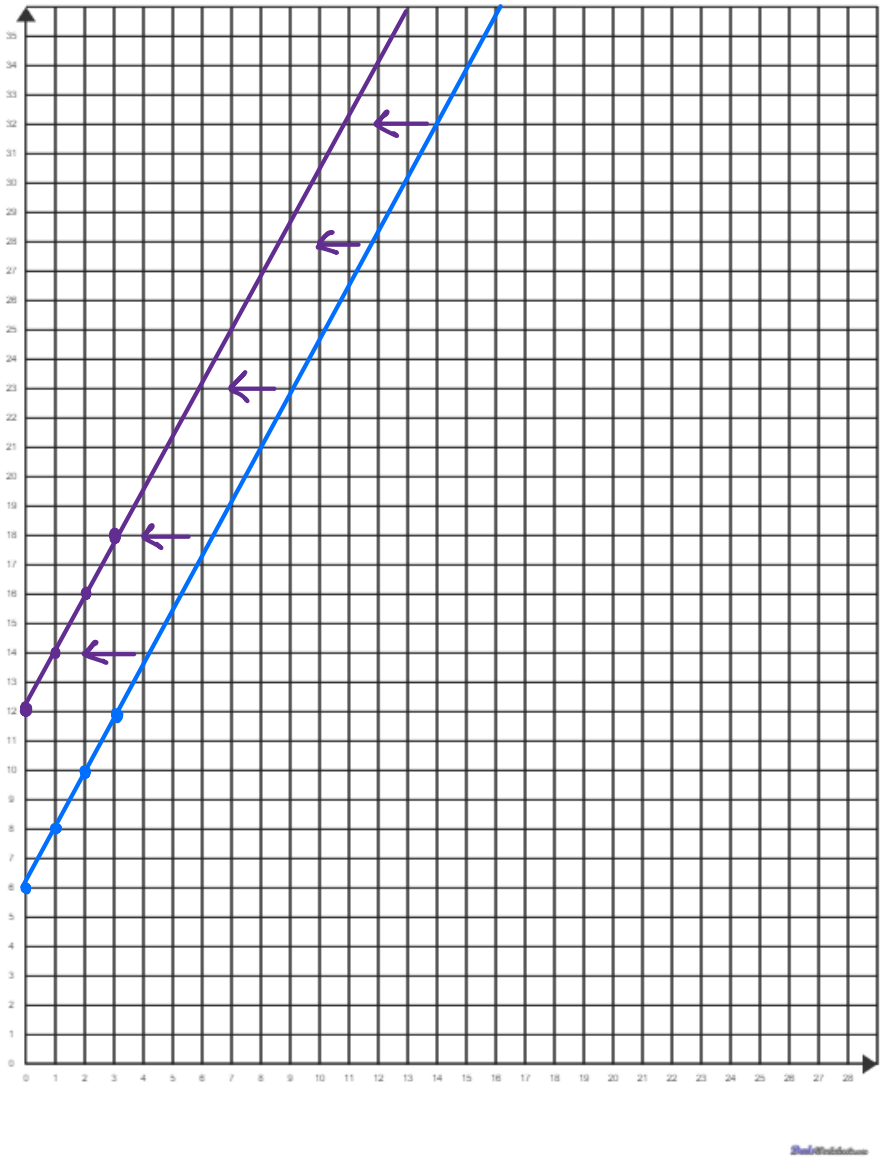
4. A firm sells ravioli and tortellini (both pastas stuffed with cheese). What would happen to each supply curve if the price of ravioli went up? (hint: making more of one necessitates making less of the other due to capacity constraints). Draw it!



Price of Ravioli ↑ (determined by market, not by me) so QS ↑ so capacity constraints imply Q ↓ at every price for tortellini

5. On the graph below #6, graph this supply curve (solve for P first to get inverse demand): Q=-3+0.5P.

6. Draw what happens if quantity supplied falls by 3 units at each price (S shifts back by 3). What's the equation for the new supply curve?



$Q = -3 + \frac{1}{2}P$

$Q + 3 = \frac{1}{2}P$

$2Q + 6 = P$

$Q = -3 + \frac{1}{2}P - 3$

$Q = -6 + \frac{1}{2}P$

$Q + 6 = \frac{1}{2}P$

$2Q + 12 = P$