

**Production Possibilities**

Suppose that there are only two goods that are made, that is food and clothing. And suppose that there is a total of 2,000 units of labor and it takes 2 units of labor to make 1 unit of food, and it takes 3 units of labor to make 1 unit of clothing. There is also a new technology that was just invented and now up to 500 units of clothing can be made using only 2 units of labor of each unit of clothing.

What would the graph of the P-P curve look like? \_\_\_\_\_

What is the maximum number of units of food that can be made? \_\_\_\_\_

What is the maximum number of units of clothing that can be made? \_\_\_\_\_

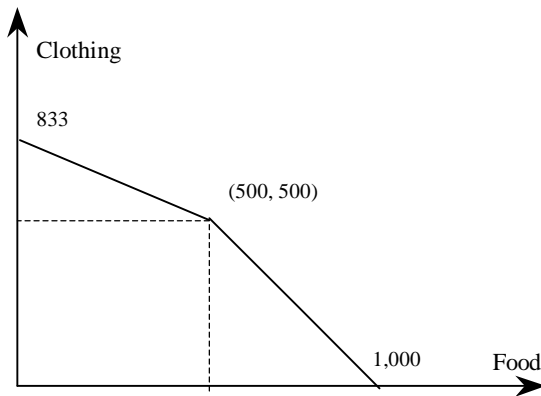
Is the graph linear, concave, or convex? \_\_\_\_\_

Is opportunity cost of clothing constant, increasing or decreasing? \_\_\_\_\_

what is it? \_\_\_\_\_

Is opportunity cost of food constant, increasing or decreasing? \_\_\_\_\_

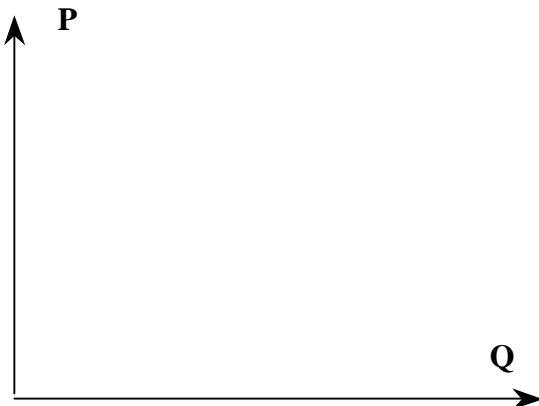
what is it? \_\_\_\_\_



**Supply and Demand:**

The supply curve of a good is what quantity of that good producers would produce if the price were p.

The demand curve of a good is what quantity of a good consumers would want to buy if the price of that good were p.



<u>Supply Shifts</u>	<u>Demand Shifts</u>	<u>Price</u>	<u>Quantity</u>
Left	No Shift	Up	Down
Right	No Shift	Down	
No Shift	Up		Up
No Shift	Down	Down	
Left	Up	Up	
Left	Down	Can't Tell	
Right	Up	Can't Tell	
Right	Down	Down	

### Marginal Utility

#### Important points:

- Utility is a scale internal to one person, one cannot compare the utility values for different people, for example if Jim has get a utility of 20 from A and Jill gets a utility of 5 we **cannot** say that Jim gets more utility from A than Jill
- Utility is only an index  $U(A) > U(B)$  only says that the utility from A is greater than that from B, but not “by how much”. It only gives order, A is preferred to B.
- Marginal Utility of good A is the utility received from the last unit of good A.

#### Important Assumptions:

- “More is better” adding one unit of anything to a consumption bundle makes it more preferable.
- Diminishing Marginal Utility: the more units of a good a person has that less utility she/he will get from an extra unit of that good.

$$\frac{MU_d}{P_d} = \frac{MU_w}{P_w}$$

Suppose a family buys 50 bagels a month, and 8 pizzas a month, and the price of a pizza is \$10, and a price of a bagel is 50cents. Assume the family gets as much utility from a 51<sup>st</sup> bagel, as from the 50<sup>th</sup> bagel. And that they get as much utility from a 9<sup>th</sup> bagel as from the 8<sup>th</sup> bagel

What can you tell about the utility the family gets from the 8<sup>th</sup> pizza vs. the utility the family gets from the 50<sup>th</sup> bagel.

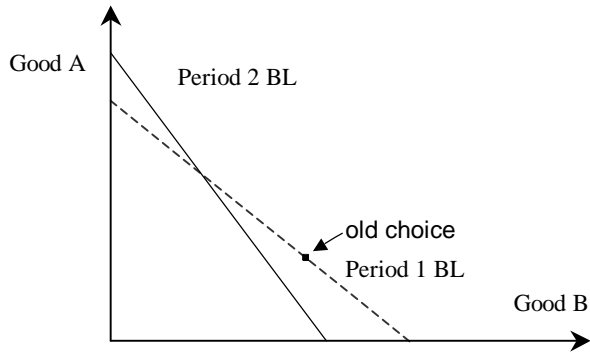
Would the family get more utility from a 51<sup>st</sup> bagel or from a 9<sup>th</sup> pizza?

From which good does the family get more total utility? **Can't Tell anything about the total utility, only the marginal utility.**

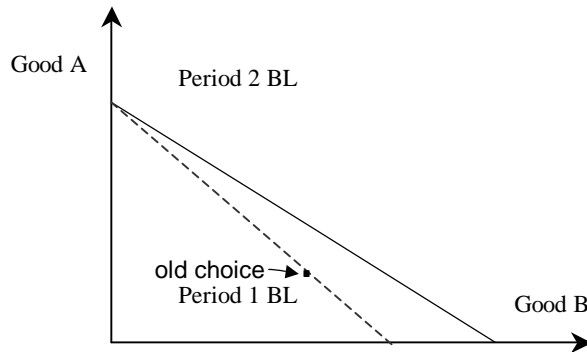
## Being Better off

You are better off in period 2 if in period 2 you can still buy the same bundle you bought in period 1, but you choose not to in period 2.

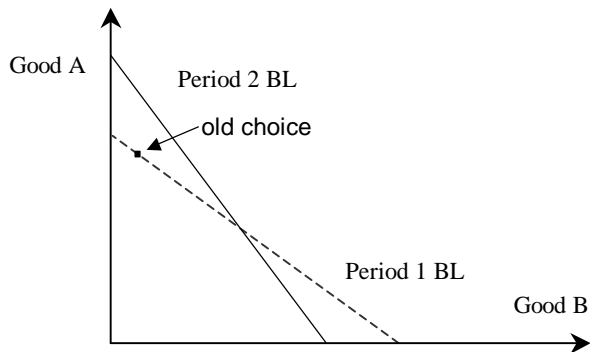
For each graph identify whether or not the person is better off, or worse off in period 2 (if possible), and if there was an increase, or decrease in real income (if there was one).



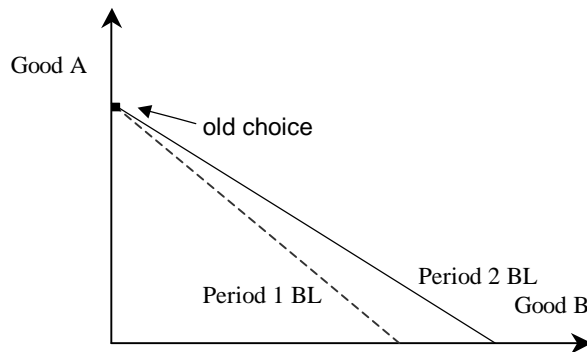
Can't Tell



Better Off



Better Off



Can't Tell, depends on new choice

Given the following budget curves, could there be people who are better off in the first period?

Could there be people who are better off in the second period?

