

# E101 - 4.2 - Indifference Curves

Indifference Curve - Shows the combinations of goods that would give the same satisfaction or total utility to an individual or household.

Marginal Rate of Substitution - The amount of one good a consumer is willing to give up to get one more unit of another good and still maintain the same level of satisfaction.

Law of Diminishing Marginal Rate of Substitution - The more of one good a person has, the less of another good they will be willing to give up to gain an additional unit of first good.

Utility Maximization 
$$MRS = \frac{P_A}{P_B} = \frac{MU_A}{MU_B} \quad \frac{MU_B}{P_B} = \frac{MU_A}{P_A}$$

Budget Constraints

let  $b = \# \text{ burgers}$        $b = \$3$       \$12 to spend  
 let  $f = \# \text{ fries}$        $f = \$2$

$$3b + 2f \leq 12$$

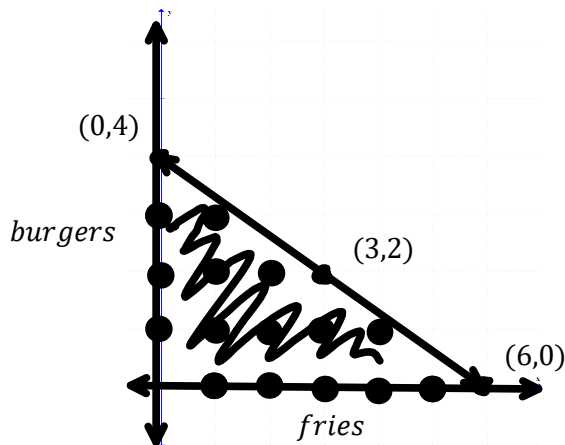
$$3b + 2f \leq 12$$

$$3b \leq -2f + 12$$

$$b \leq -\frac{2}{3}f + 4$$

$$y = mx + b$$

f	b
0	4
6	0



$(f, b)$   
 $(0,4) = \$12$   
 $(3,2) = \$12$   
 $(6,0) = \$12$

To Calculate we need the Marginal Utility of each product