CONCEPT: <u>INCOME ELASTICITY OF DEMAND</u>

● Income Elasticity of Demand helps us understand whether goods are normal goods or inferior goods.

Income Elasticity of Demand: How does quantity demanded respond to a change in consumer income?

$$Income\ Elasticity\ of\ Demand = \frac{Percentage\ Change\ (\%\Delta)\ in\ Quantity\ Demanded}{Percentage\ Change\ (\%\Delta)\ in\ Income}$$

□ We still use the __________________________ in this calculation!

□ For Income Elasticity of Demand, positive and negative answers make a difference!

Steps for calculating Income Elasticity of Demand:

1. Subtract the two quantities and subtract the two incomes.
2. Sum the two quantities and sum the two incomes.
3. Divide your Quantity Sum by two. Divide your Income Sum by two.
4. Divide your answers from Steps 1 and 3. (Step 1 ÷ Step 3 for both quantity and income)
5. Divide your answers from Step 4. (Quantity ÷ Income)
6. Decide whether quantity and income increased/decreased (+/-)

EXAMPLE: At a price of $75 per serving of caviar, the quantity demanded is 9,000. Although price did not change, consumer income increased from $950 per week to $1,050 per week, causing the quantity demanded to increase to 11,000. What is the income elasticity of demand for caviar?

□ The income elasticity of demand helps us determine the type of product:

- Positive and greater than 1 (income elastic) → Normal Good, Luxury
- Positive and less than 1 (income inelastic) → Normal Good, Necessity
- Negative → Inferior Good

PRACTICE: Johnny Clutch just got a raise from $900 per week to $1100 per week. As a result, he decreases the amount of ramen noodles he buys from seven cartons a week to one carton a week. For Johnny, ramen noodles are:

a) Normal Goods, Necessity
b) Normal Goods, Luxury
c) Inferior Goods
d) Substitute Goods

PRACTICE: Johnny Clutch just got a raise from $950 per week to $1,050 per week. As a result, he increases the number of concerts he attends by five percent. His demand for concerts is:

a) Income elastic
b) Income inelastic
c) A horizontal line
d) A vertical line

PRACTICE: A twelve percent increase in consumer income has caused the quantity of orange juice demanded to increase from 24,000 to 26,000. The income elasticity of demand for orange juice is:

a) 0.25
b) 0.33
c) 0.50
d) 0.67