

# CHAPTER 11

## Consumer Preferences & Consumer Choice



**Kazu Matsuda**  
**IBEC 202**  
**Microeconomics**

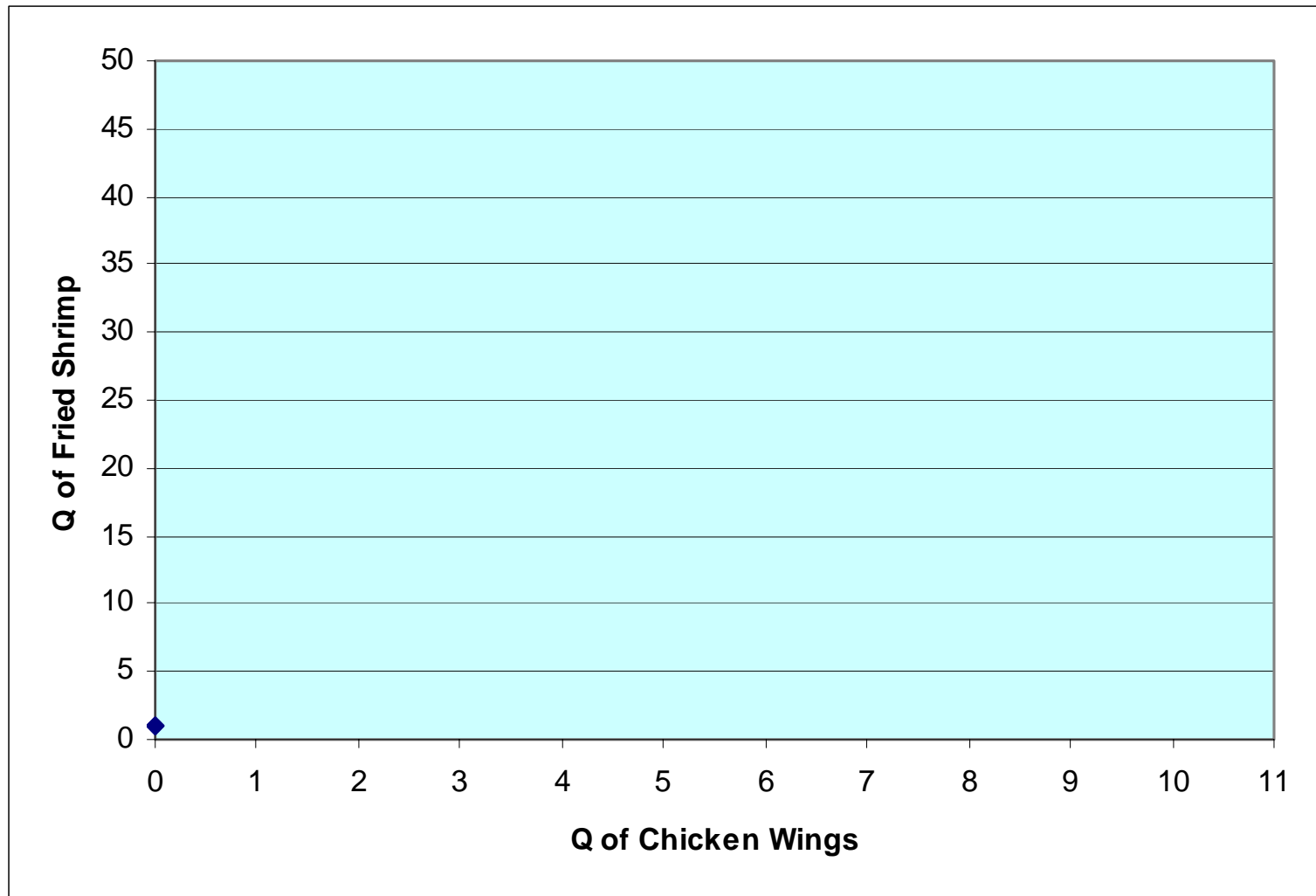
# Mapping the Utility Function

- A **utility function** = determines a consumer's total utility given his or her consumption bundle.
- Matsuda is a consumer who buys only two goods: chicken wings, measured in the number of orders, and fried shrimp.



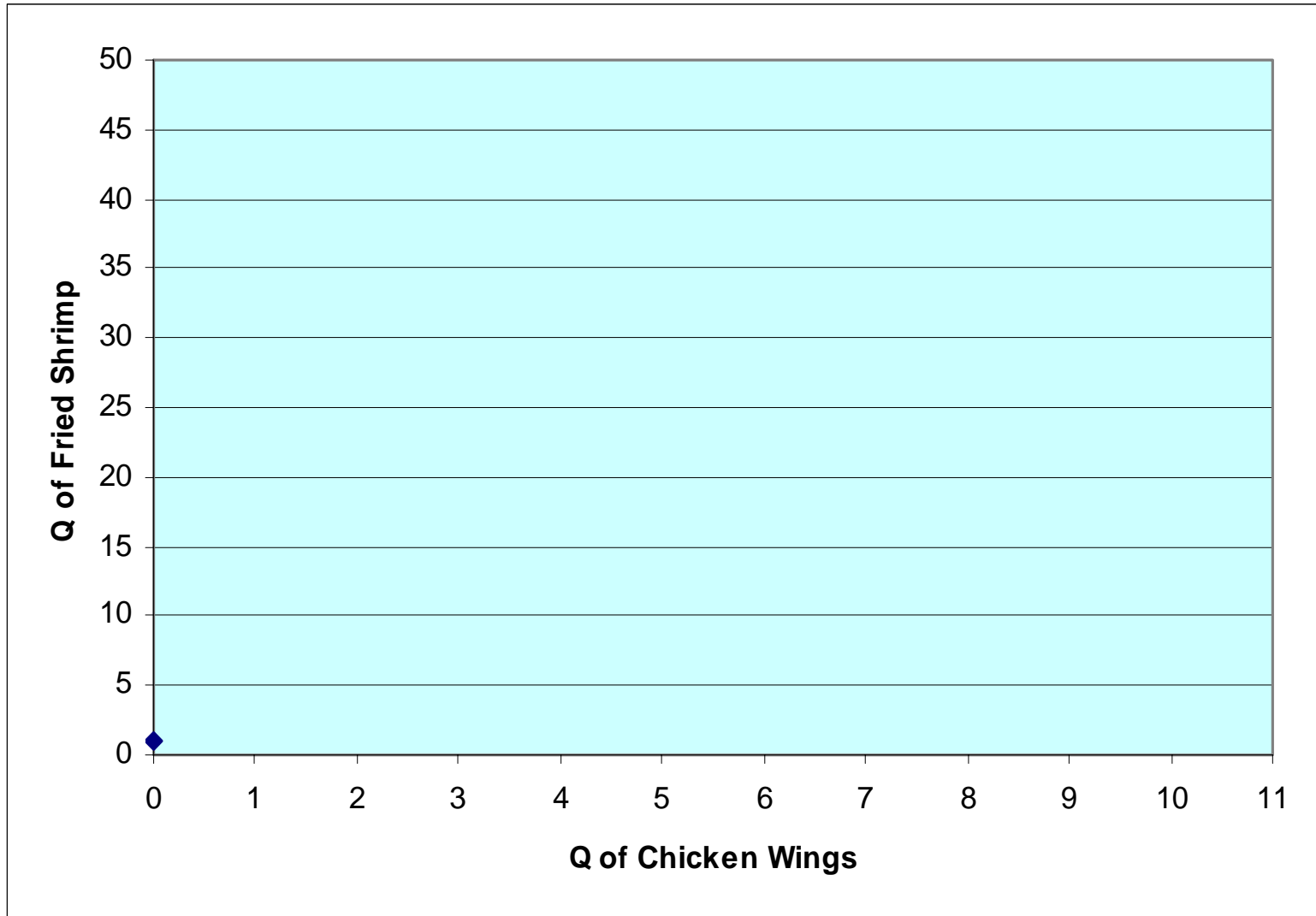
# Indifference curve

- An **indifference curve** = is a line that shows all the consumption bundles that yield the same amount of total utility for an individual.



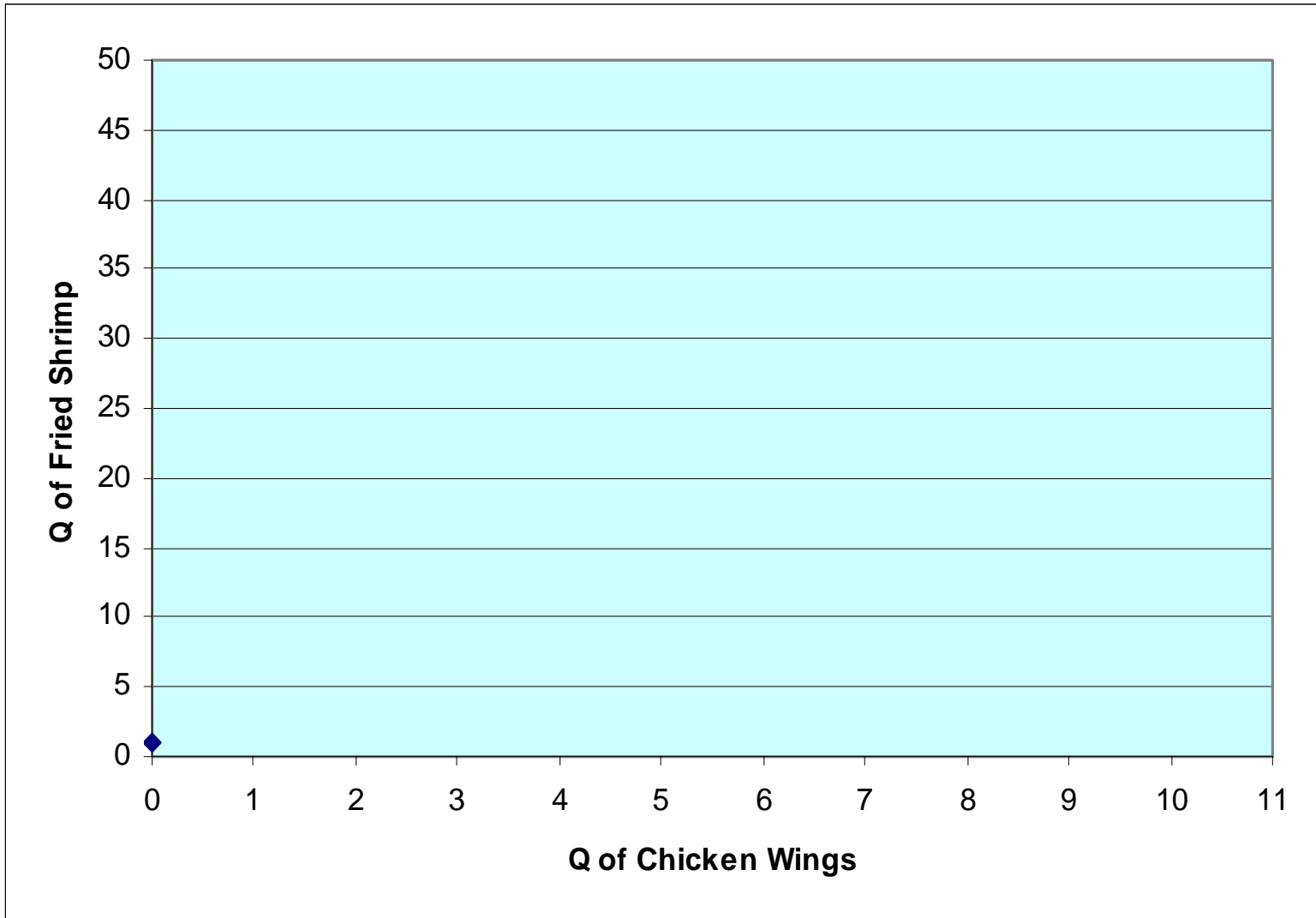
# Properties of Indifference Curves

[1]



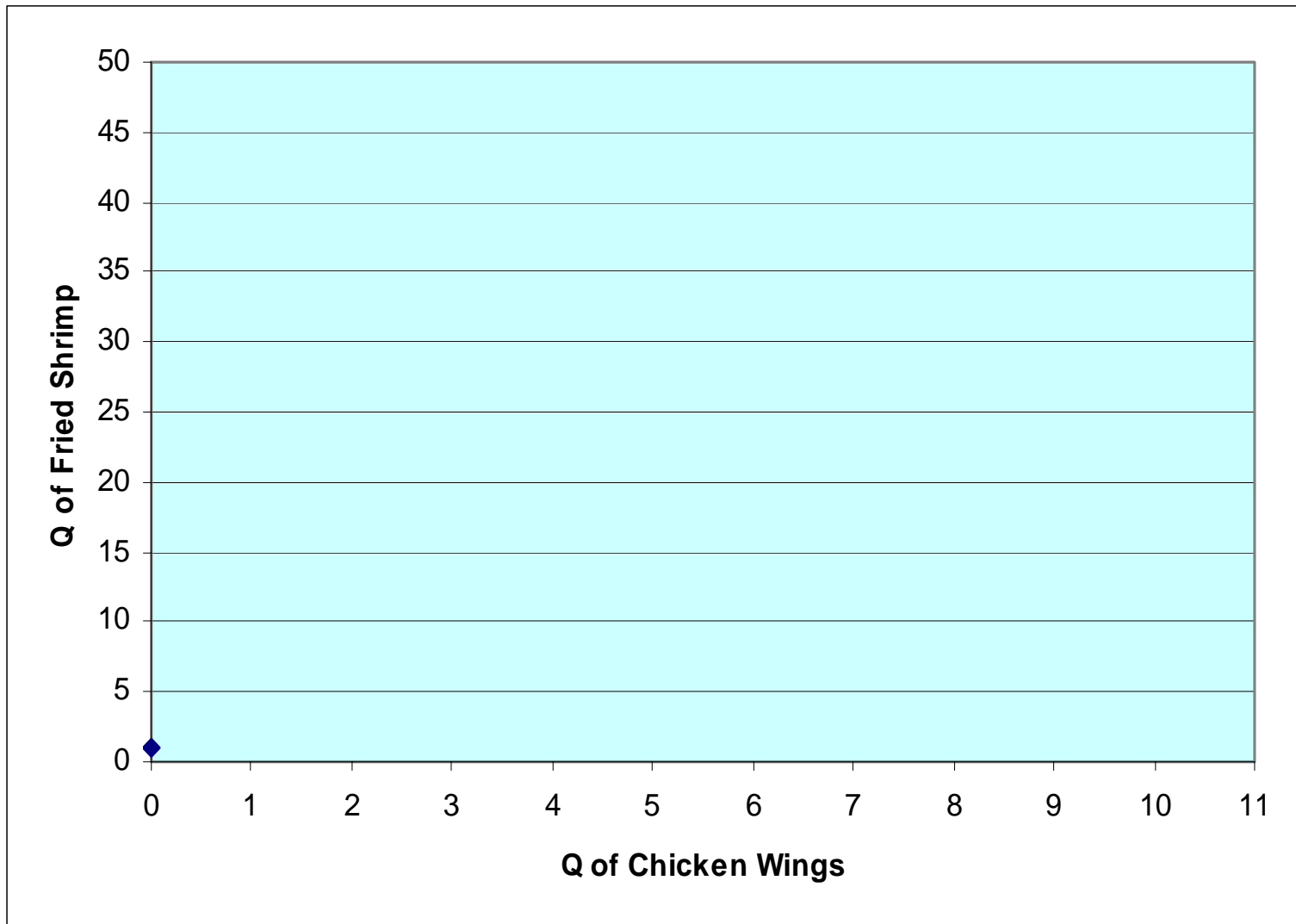
# Properties of Indifference Curves

[2]



# Properties of Indifference Curves

- In addition, indifference curves for most goods, called ordinary goods, have two more properties:



# Properties of Indifference Curves

- Goods that satisfy all four properties of indifference curve maps are called ordinary goods.

## Indifference Curves and Consumer Choice

- **Marginal rate of substitution** = Your personal terms of the trade-off between two goods.

# Marginal rate of substitution: The Changing Slope of an Indifference Curve





# Diminishing marginal rate of substitution

- The flattening of indifference curves as you slide down them to the right—which reflects the same logic as the principle of diminishing marginal utility—is known as the principle of **diminishing marginal rate of substitution**.



# Optimal Consumption Bundle: General



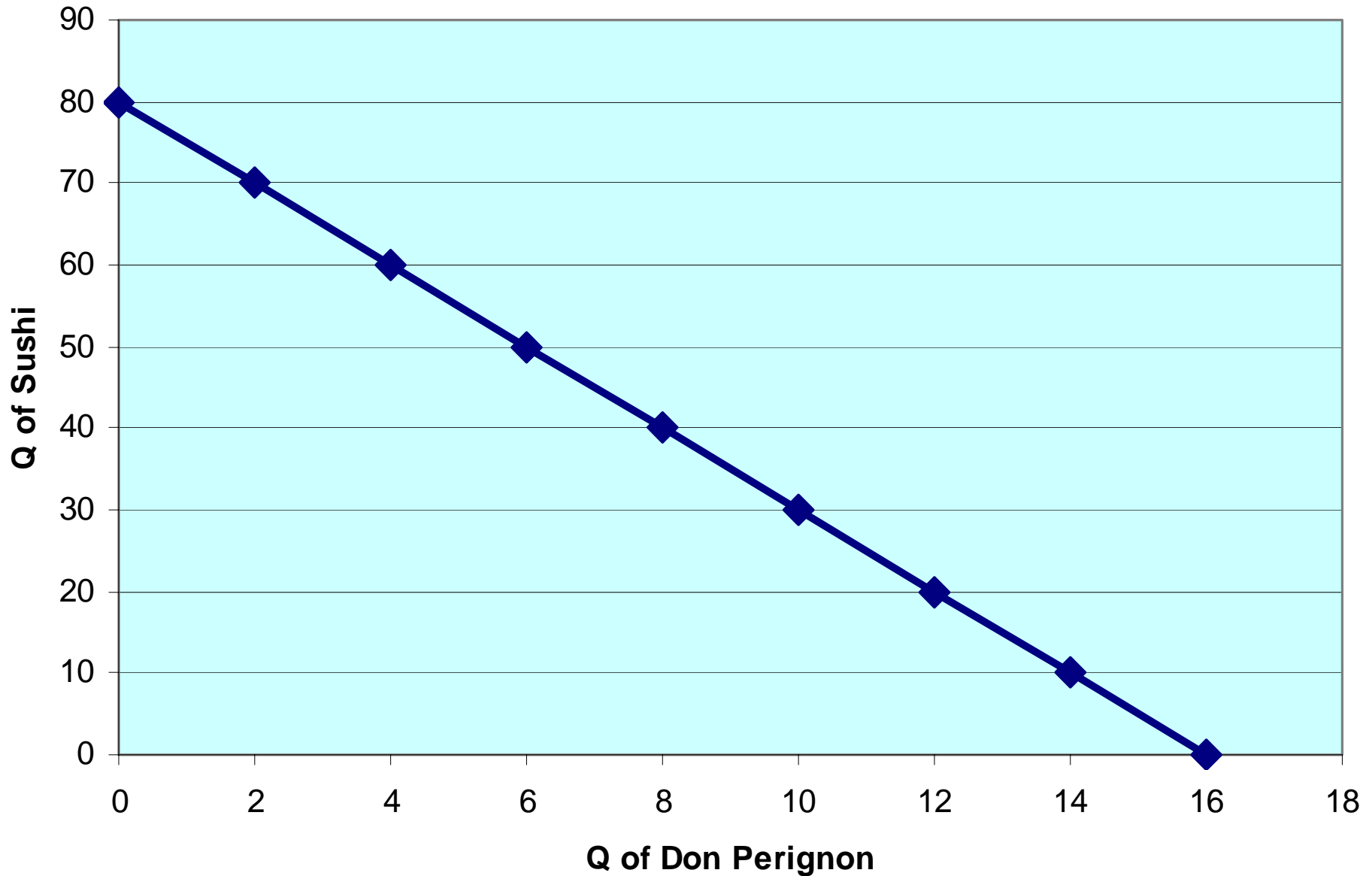
# Optimal Consumption Bundle: Example

Use the following numbers (same as the book):

- Matsuda's income = \$2,400 per month.
- Price of Dom Perignon = \$150.
- Price of sushi = \$30.

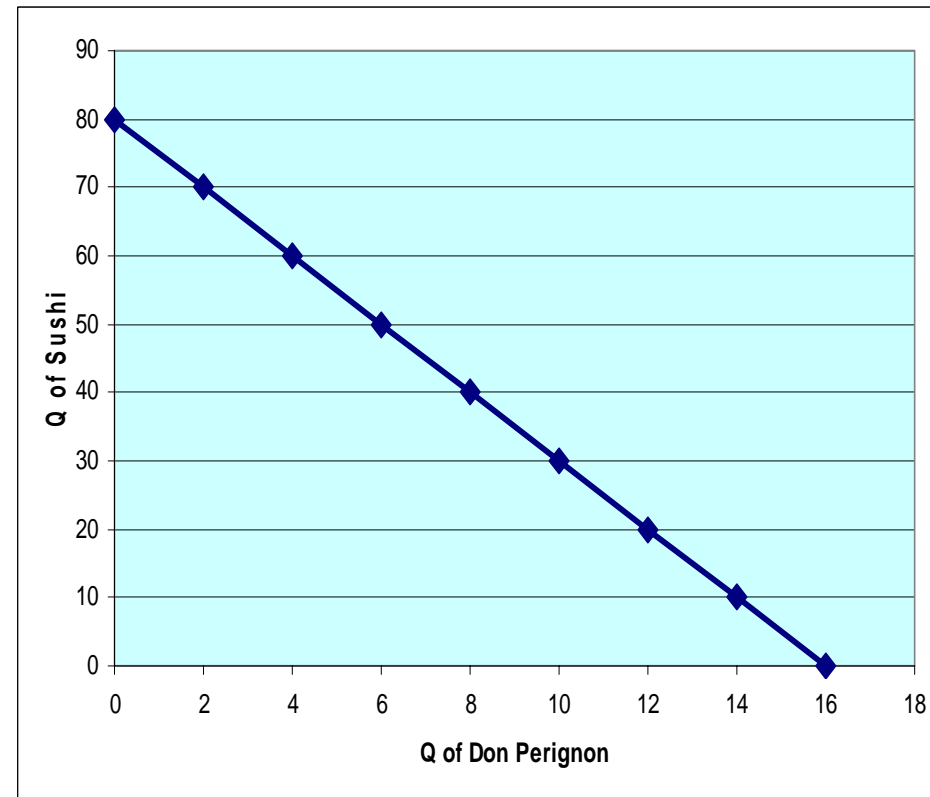
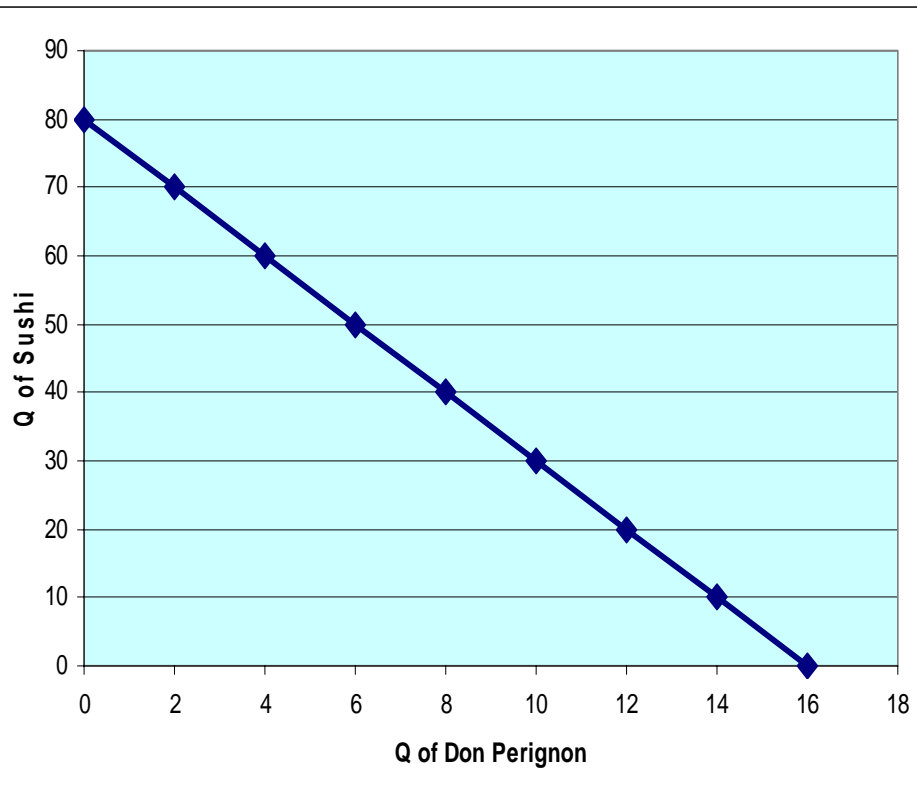


# Optimal Consumption Bundle: Example



# Preferences and Choices

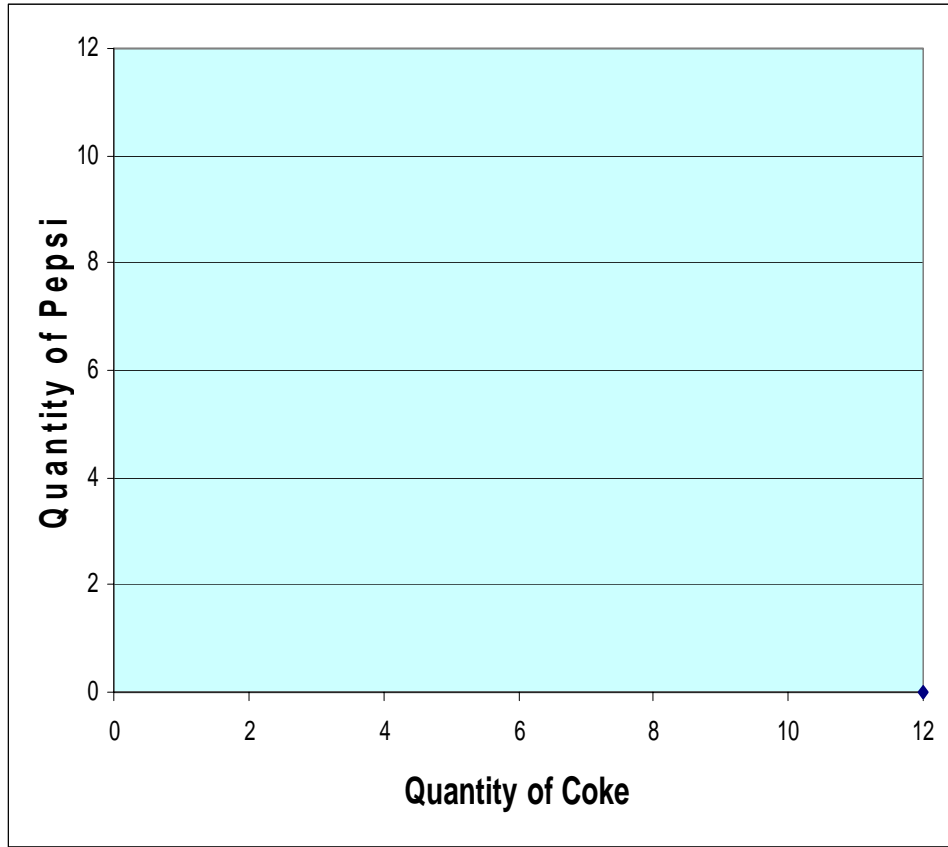
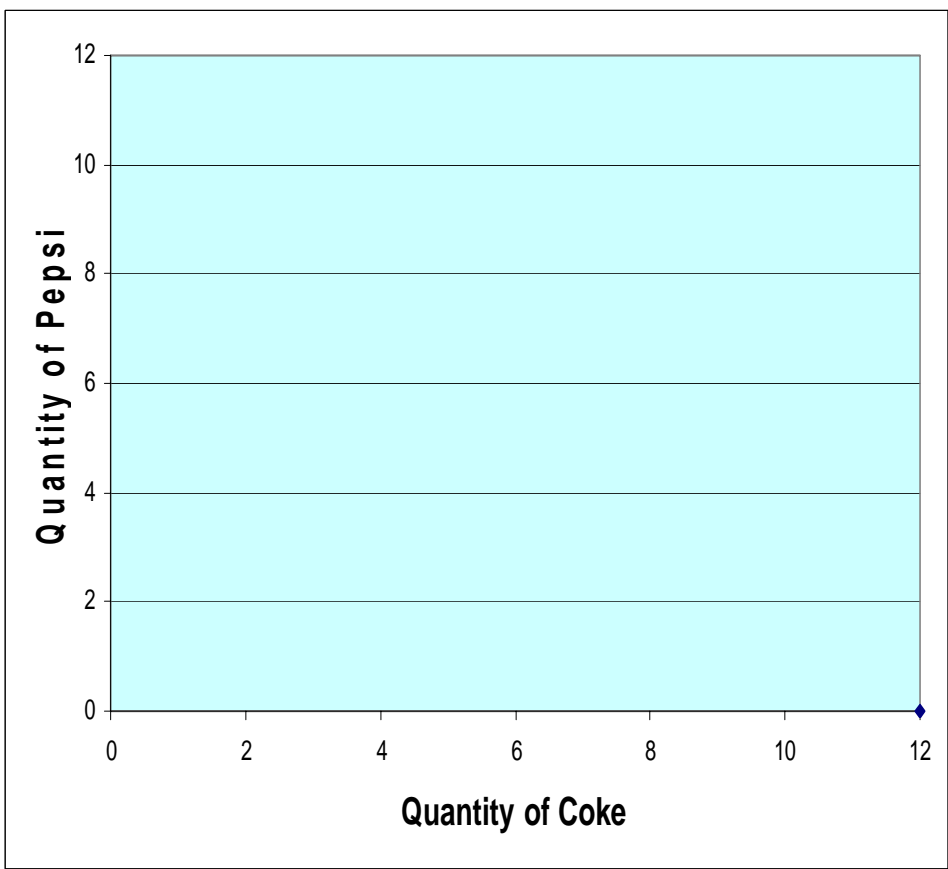
- When we say that two consumers have different preferences, we mean that they have different utility functions.
- This in turn means that they will have indifference curve maps with different shapes.
- Both of them have an income of \$2,400 and face prices of \$30 per sushi and \$150 per Dom Perignon.



# Using Indifference Curves: Substitutes and Complements

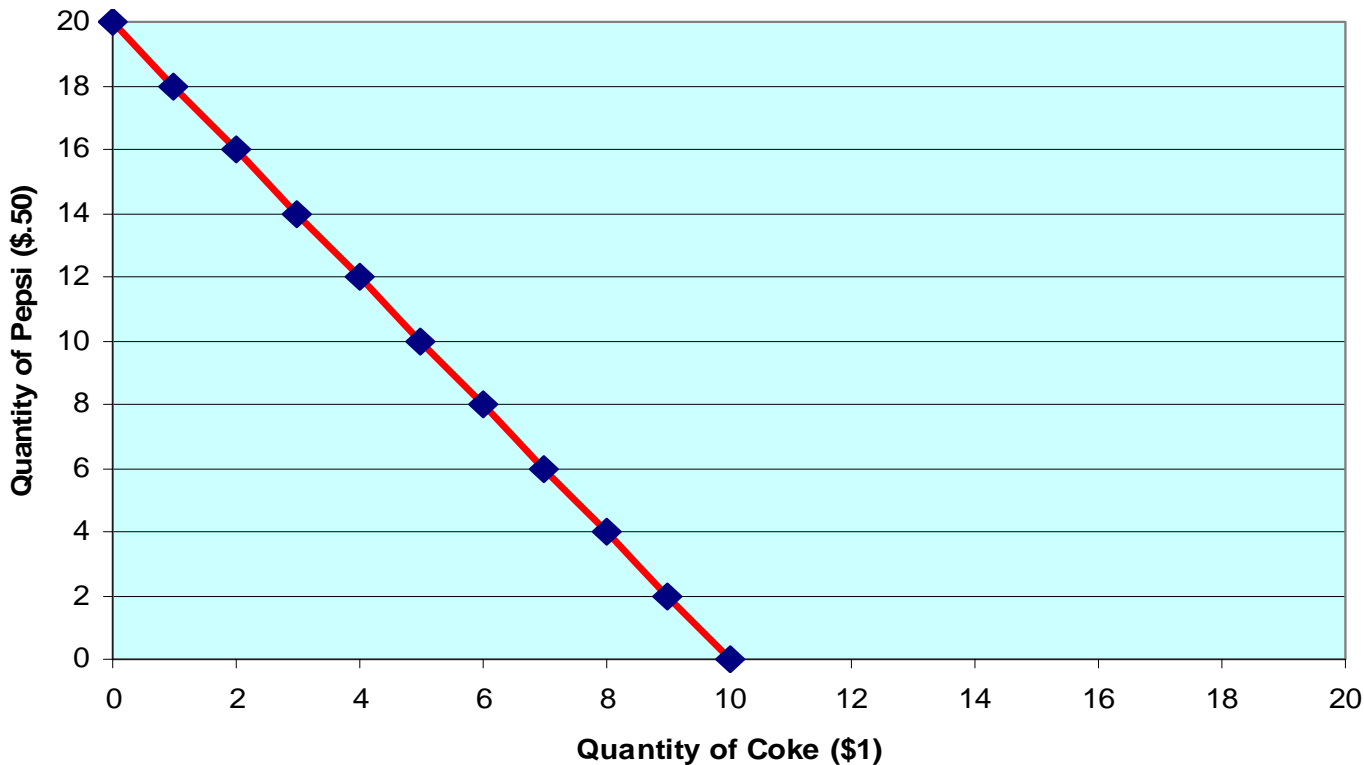
- What determines whether two goods are substitutes or complements?

## Perfect Substitutes



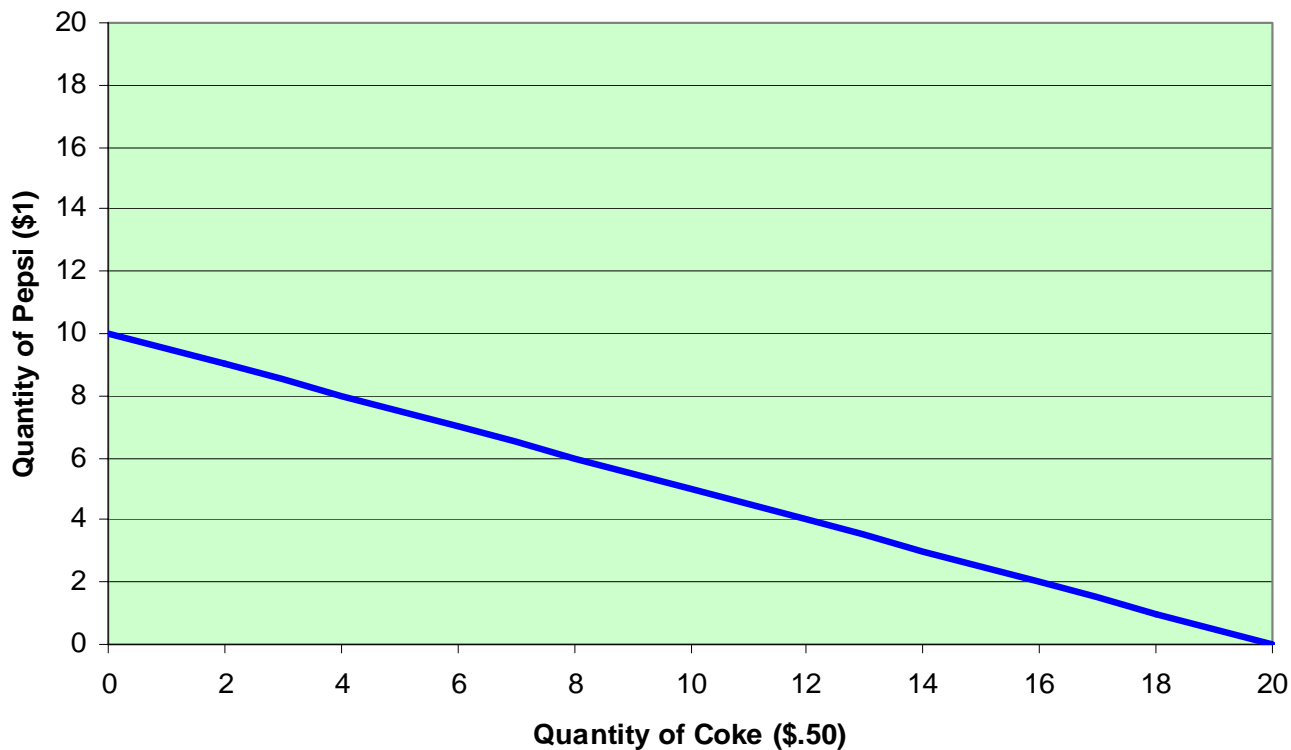
- Your income = \$10
- Price of Coke = \$1
- Price of Pepsi = \$.50
- Coke and Pepsi are perfect substitutes with  $MRS = 1$ .
- Where is your optimal consumption bundle?

Perfect Substitutes Case



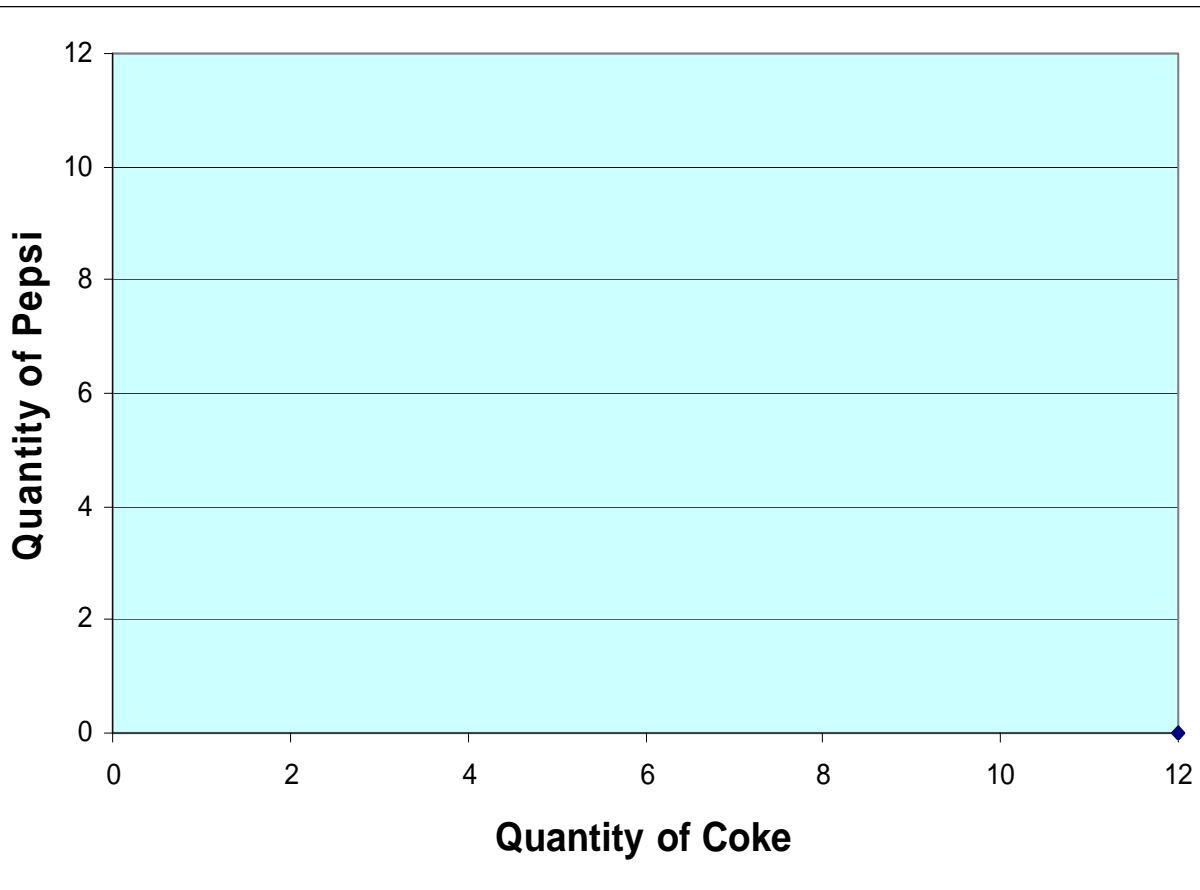
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Perfect Substitutes Case





- Your income = \$10
- Price of Coke = \$1
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# Perfect Complements

Perfect Complements Case

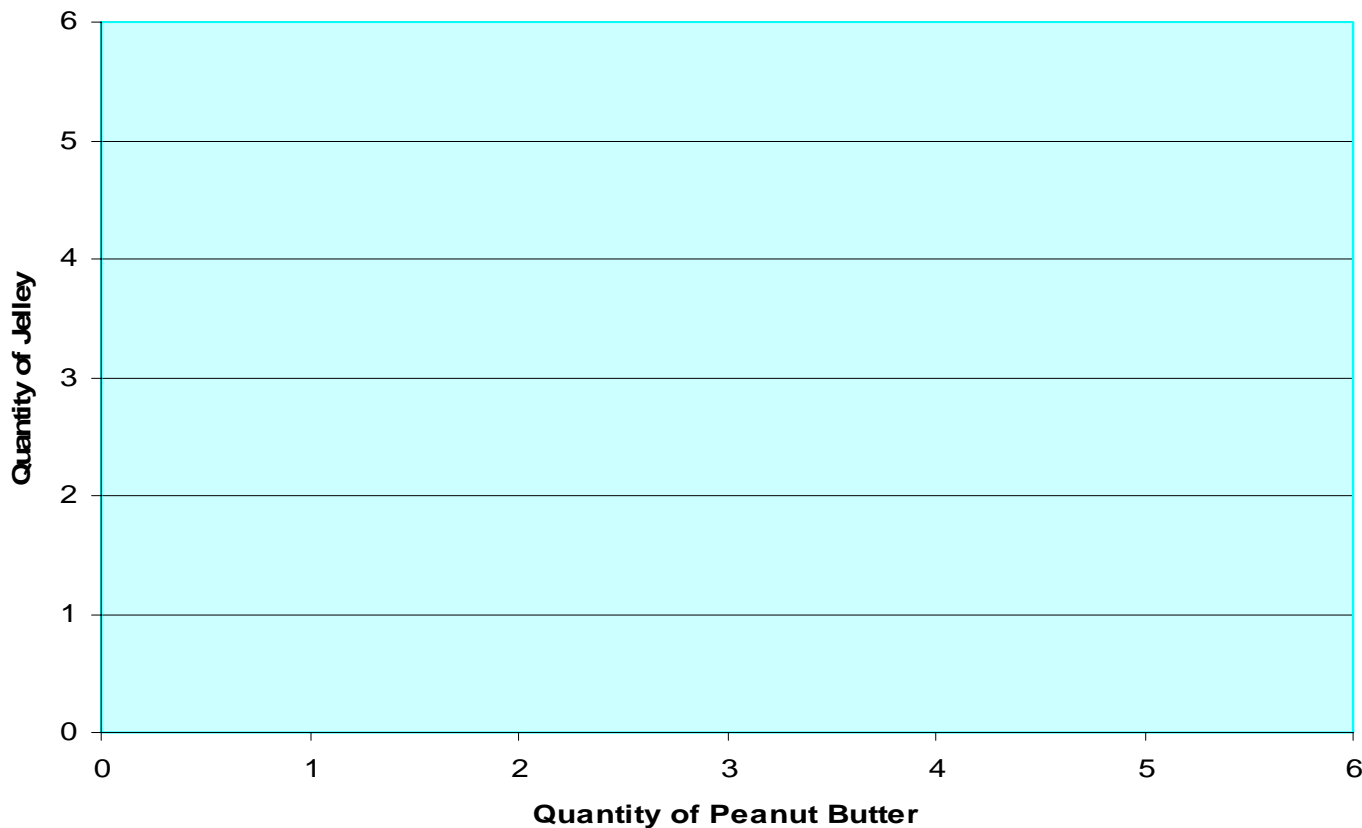


Perfect Complements Case



- Your income = \$12
- Price of Coke = \$3
- Price of Pepsi = \$3
- Peanut butter and jelly are perfect complements with 1-1 ratio.
- Where is your optimal consumption bundle?

**Perfect Complements Case**



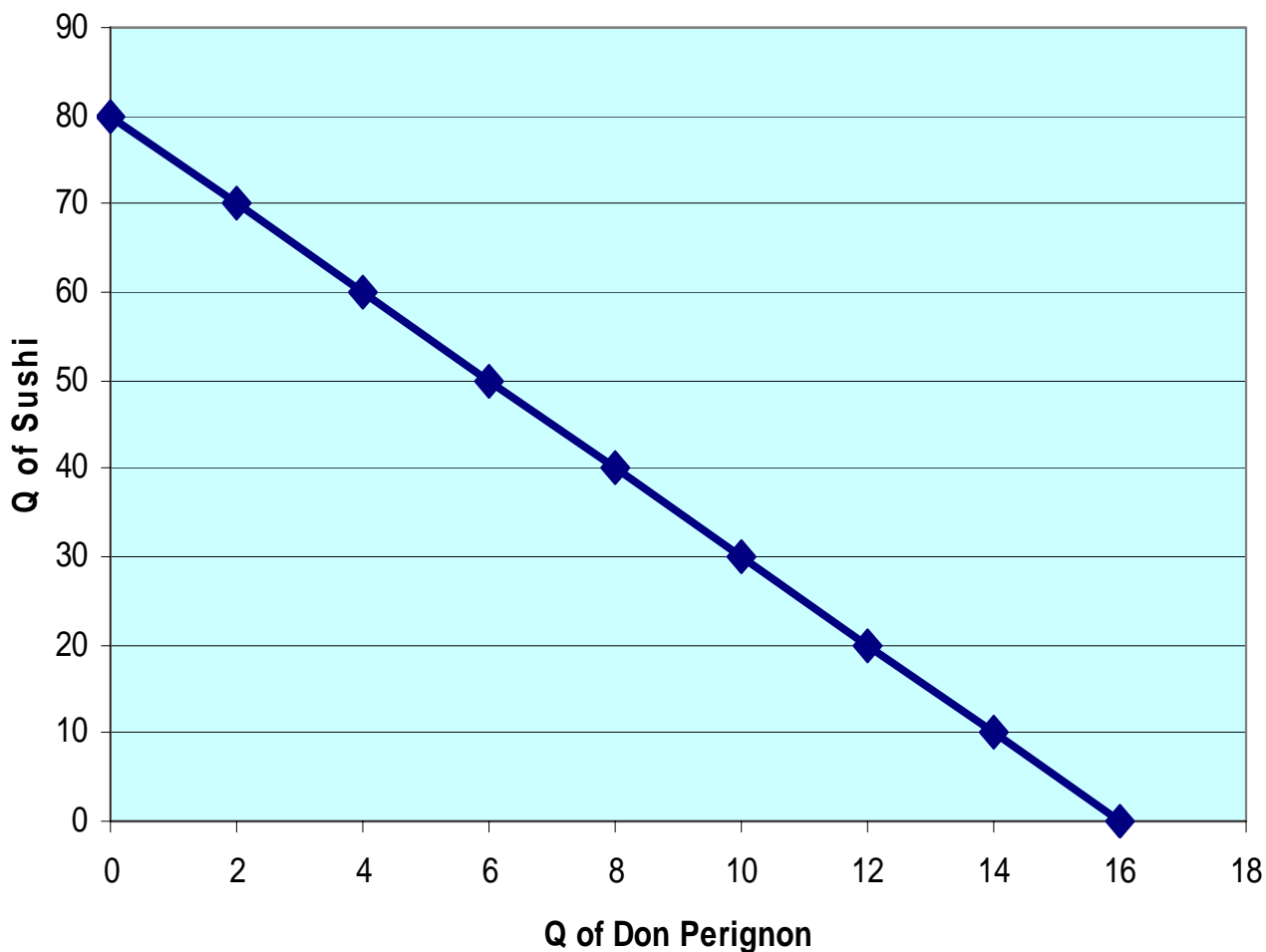
# Prices, Income, and Demand

- How would our consumption choice change if either the prices of goods or our income change?



Use the following numbers:

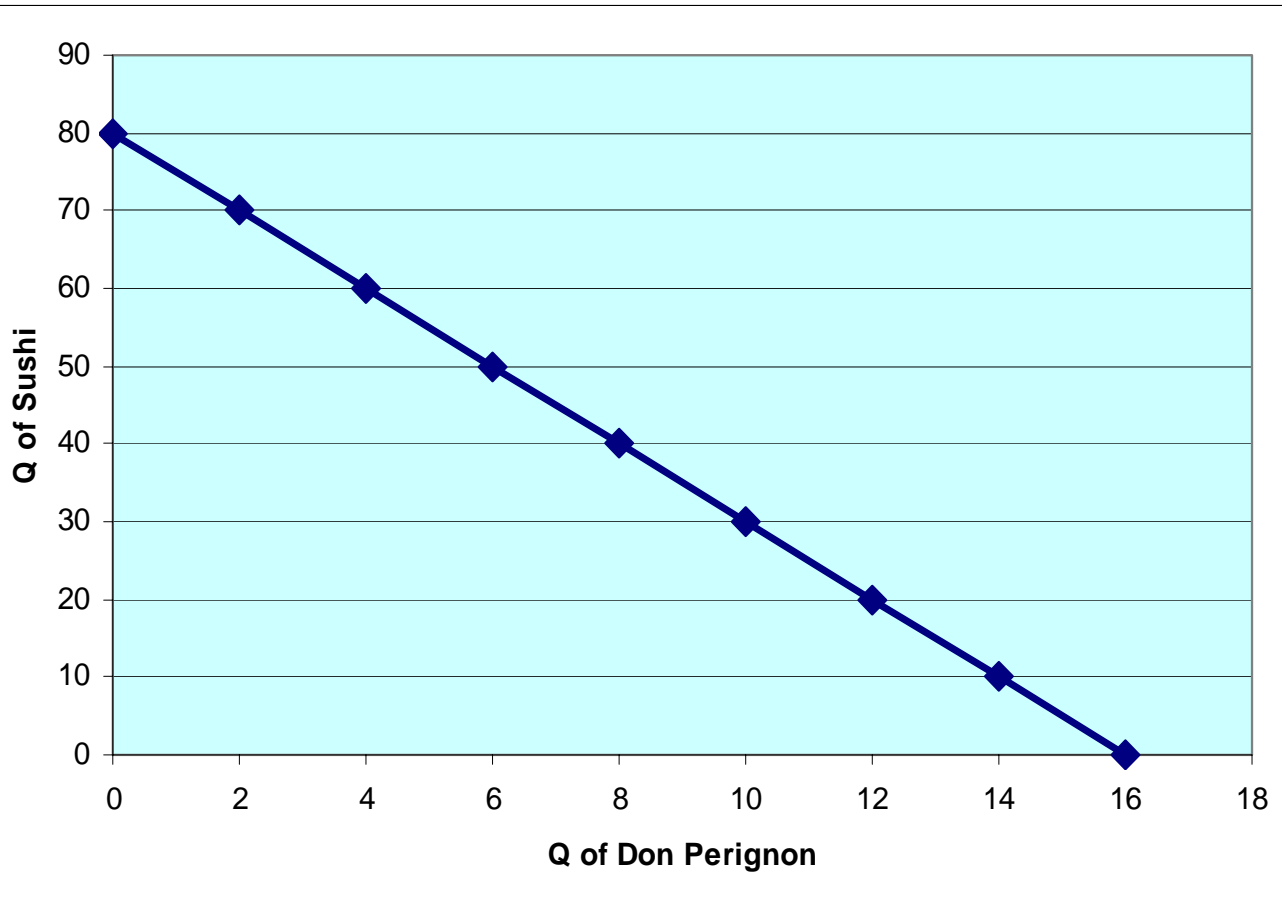
- Your income = \$2,400 per month.
- Price of Dom Perignon = \$150. **Rises to**
- Price of sushi = \$30.



# Income and Consumption: Normal Goods

Use the following numbers:

- Your income = \$2,400 per month. **Decreases to** .
- Price of Dom Perignon = \$150.
- Price of sushi = \$30.



# Income and Consumption: Inferior Goods

Use the following numbers:

- Your income = \$2,400 per month. **Decreases to** .
- Price of Dom Perignon = \$150.
- Price of ramen noodles = \$30.

