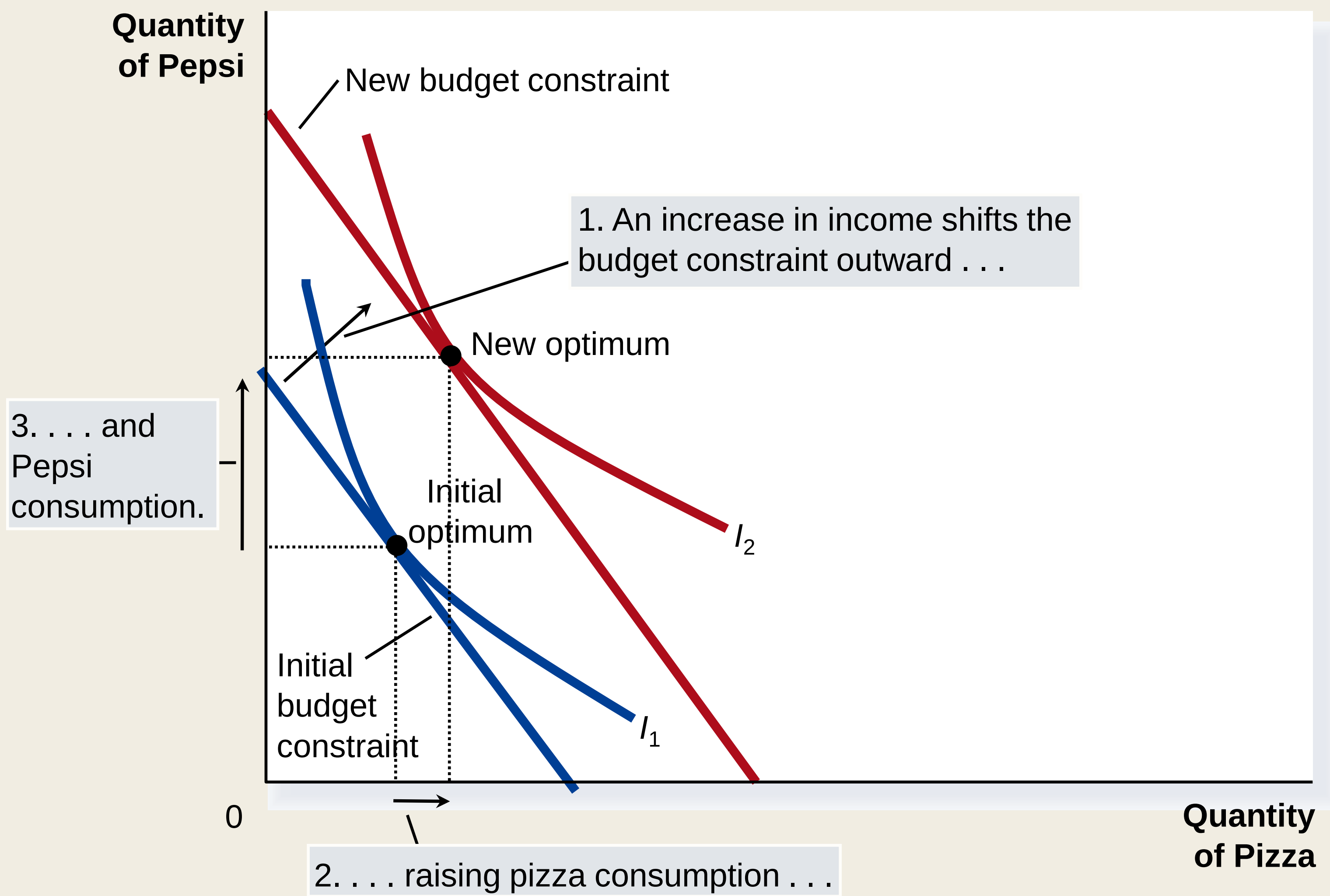
21

The Theory of Consumer Choice

How Changes in Income Affect the Consumer's Choices

- An increase in income shifts the budget constraint outward.
  - The consumer is able to choose a better combination of goods on a higher indifference curve.

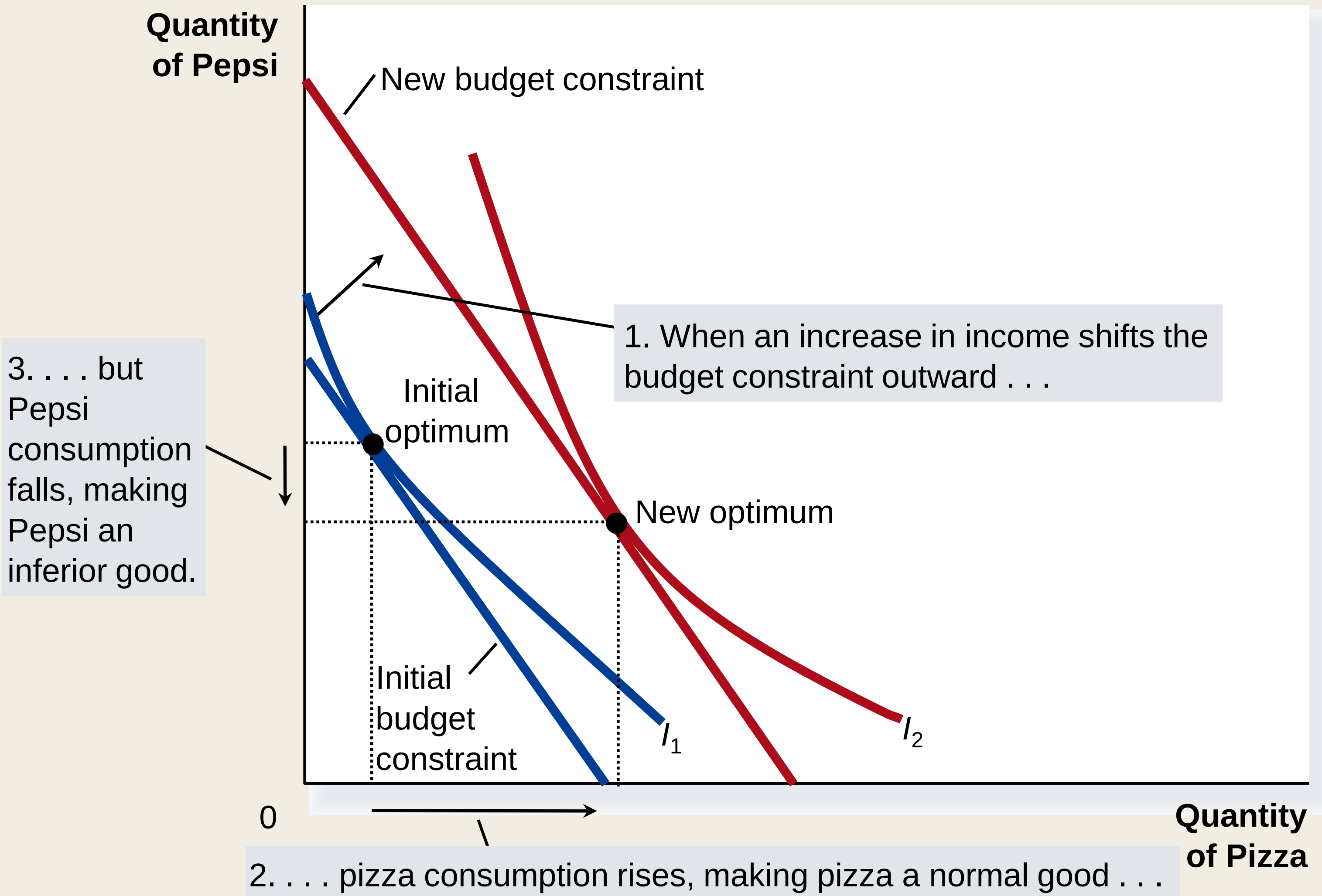
Figure 7 An Increase in Income



How Changes in Income Affect the Consumer's Choices

- Normal versus Inferior Goods
  - If a consumer buys more of a good when his or her income rises, the good is called a *normal good.*
  - If a consumer buys less of a good when his or her income rises, the good is called an *inferior good.*

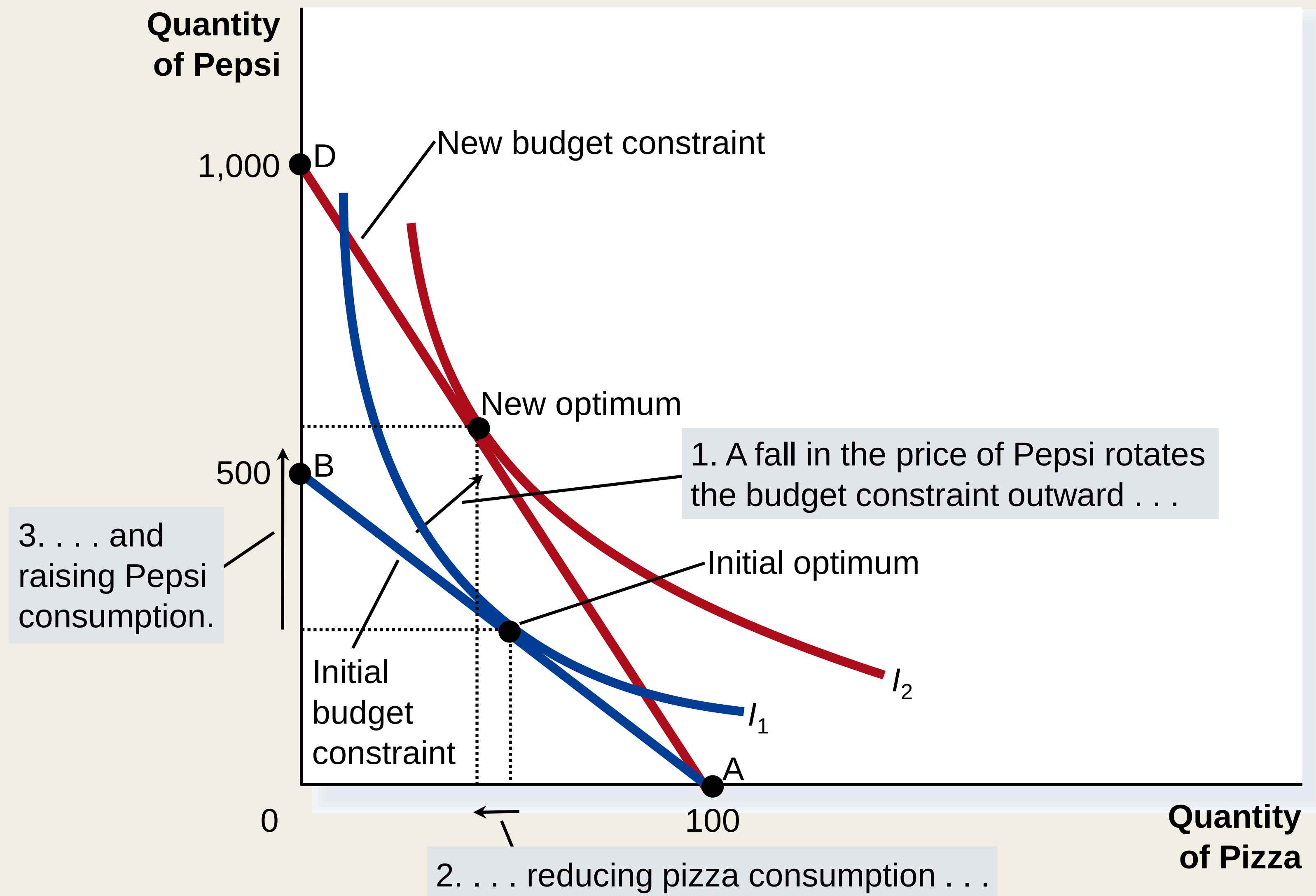
Figure 8 An Inferior Good



How Changes in Prices Affect Consumer's Choices

- A fall in the price of any good rotates the budget constraint outward and changes the slope of the budget constraint.

Figure 9 A Change in Price



Income and Substitution Effects

- A price change has two effects on consumption.
  - An income effect
  - A substitution effect

Income and Substitution Effects

- The Substitution Effect
  - The *substitution effect* is the change in consumption that results when a price change moves the consumer along an indifference curve to a point with a different marginal rate of substitution.
- The Income Effect
  - The *income effect* is the change in consumption that results when a price change moves the consumer to a higher or lower indifference curve.

Income and Substitution Effects

- A Change in Price: Substitution Effect
  - A price change first causes the consumer to move from one point on an indifference curve to another on the same curve.
    - Illustrated by movement from point A to point B.
- A Change in Price: Income Effect
  - After moving from one point to another on the same curve, the consumer will move to another indifference curve.
    - Illustrated by movement from point B to point C.

Figure 10 Income and Substitution Effects

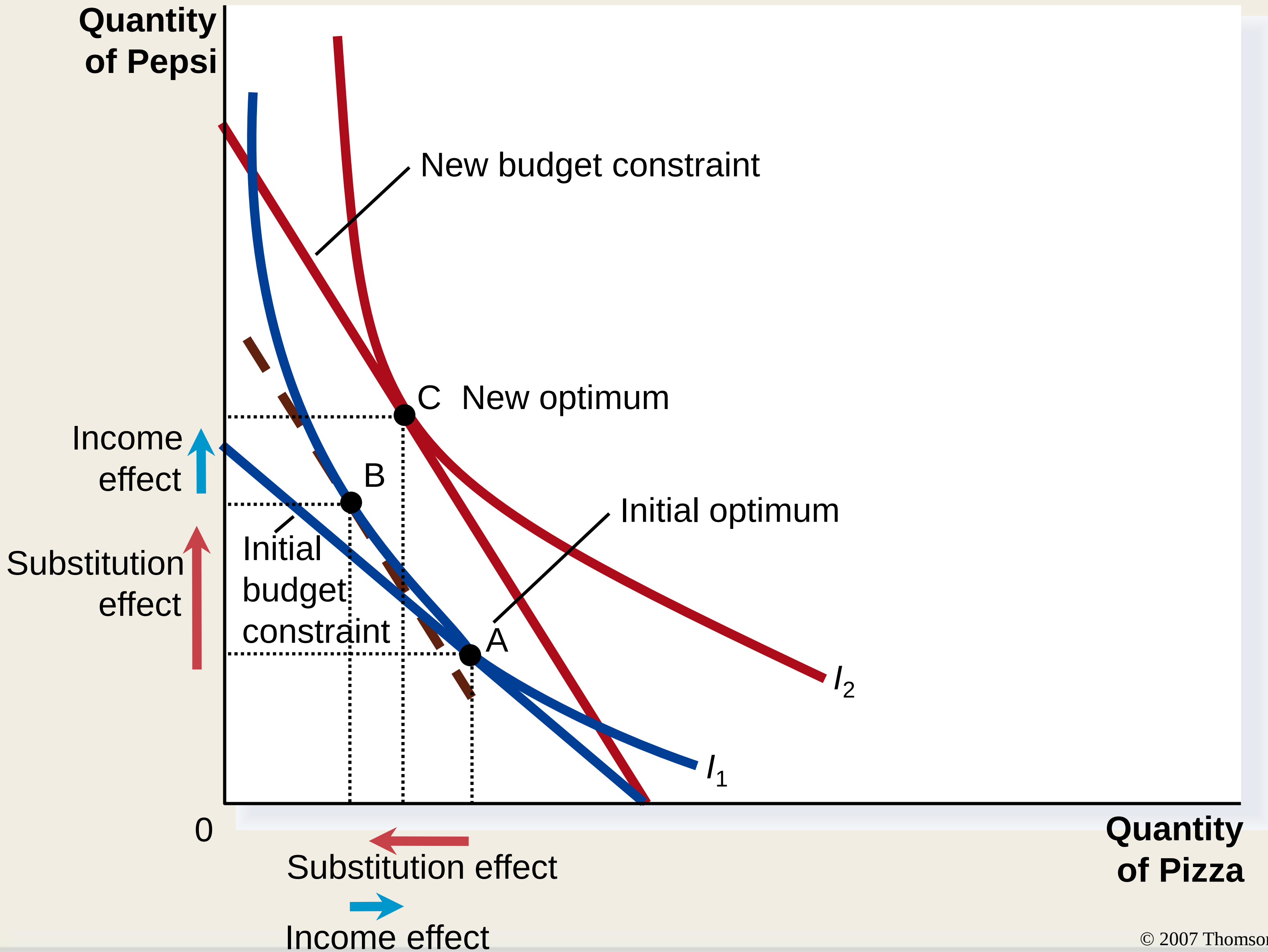


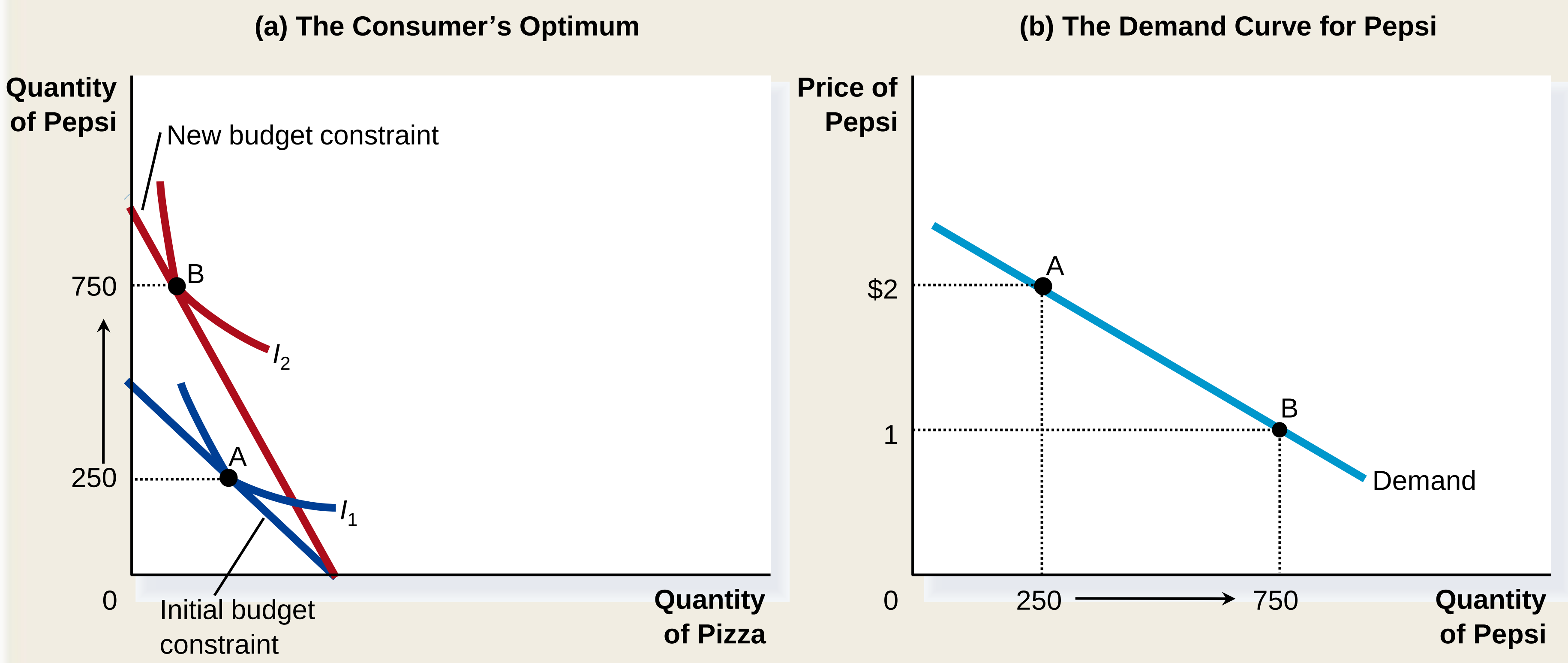
Table 1 Income and Substitution Effects When the Price of Pepsi Falls

Good	Income Effect	Substitution Effect	Total Effect
Pepsi	Consumer is richer, so he buys more Pepsi.	Pepsi is relatively cheaper, so consumer buys more Pepsi.	Income and substitution effects act in same direction, so consumer buys more Pepsi.
Pizza	Consumer is richer, so he buys more pizza.	Pizza is relatively more expensive, so consumer buys less pizza.	Income and substitution effects act in opposite directions, so the total effect on pizza consumption is ambiguous.

Deriving the Demand Curve

- A consumer's demand curve can be viewed as a summary of the optimal decisions that arise from his or her budget constraint and indifference curves.

Figure 11 Deriving the Demand Curve



- Do all demand curves slope downward?

Do All Demand Curves Slope Downward?

- Demand curves can sometimes slope upward.
- This happens when a consumer buys more of a good when its price rises.
- Suppose there is a commodity x and its price is denoted by P.
- When P falls, x becomes relatively cheaper in relation to the other good y.

- Substitution effect entails the consumer will consume more of x even though he is confined to the same indifference curve of the pre price change level. This holds for both normal and inferior goods.
- For normal goods, income effect will entail an increase in consumption of x.
- For inferior goods, income effect will entail a decrease in consumption of x.

- For normal goods, both SE and IE work in the same direction and consumption of x is increased.
- As a result, the demand curve for normal goods is always downward sloping.

- For inferior goods, SE and IE work in opposite directions. According to SE, x is raised. But according to IE, x is decreased.
- If SE dominates IE, then for such inferior goods, the demand curve is till downward sloping.
- If IE dominates SE, then for such inferior goods, the demand curve is upward sloping.

- *Giffen goods*
  - Economists use the term Giffen good to describe an inferior good that violates the law of demand, where the demand curve is upward sloping.
  - Giffen goods are goods for which an increase in the price raises the quantity demanded.