

# Chapter 05 Appendix: Indifference Curves

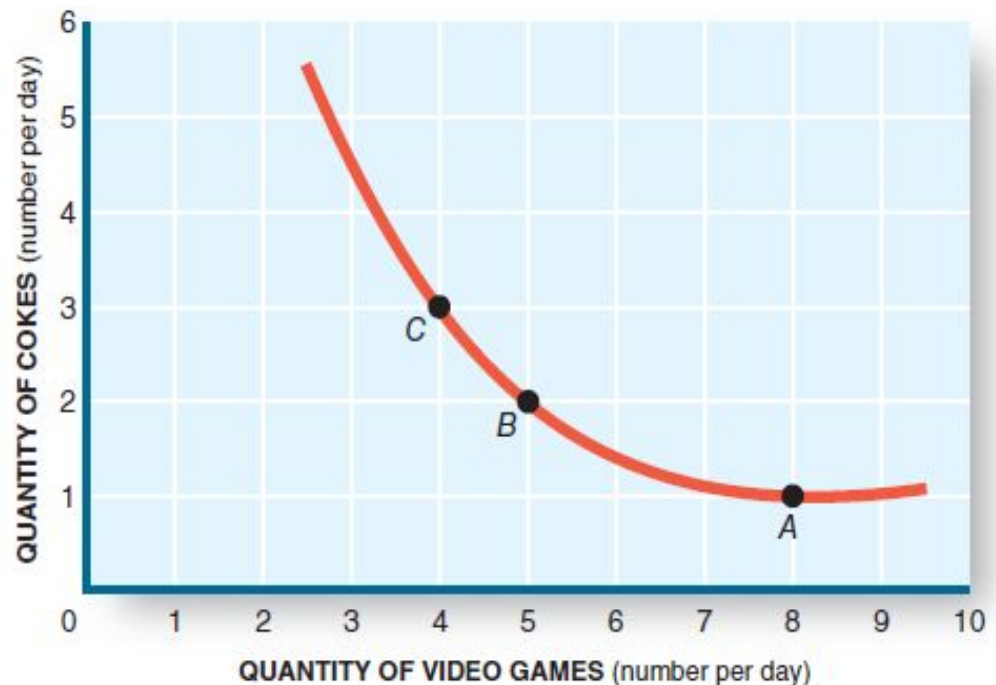
# Indifference Curves

**Indifference curve:** a curve depicting alternative combinations of goods that yield equal satisfaction.

- This is a mechanism for illustrating consumer preferences.
- It can be used as a basis from which to construct a demand curve.

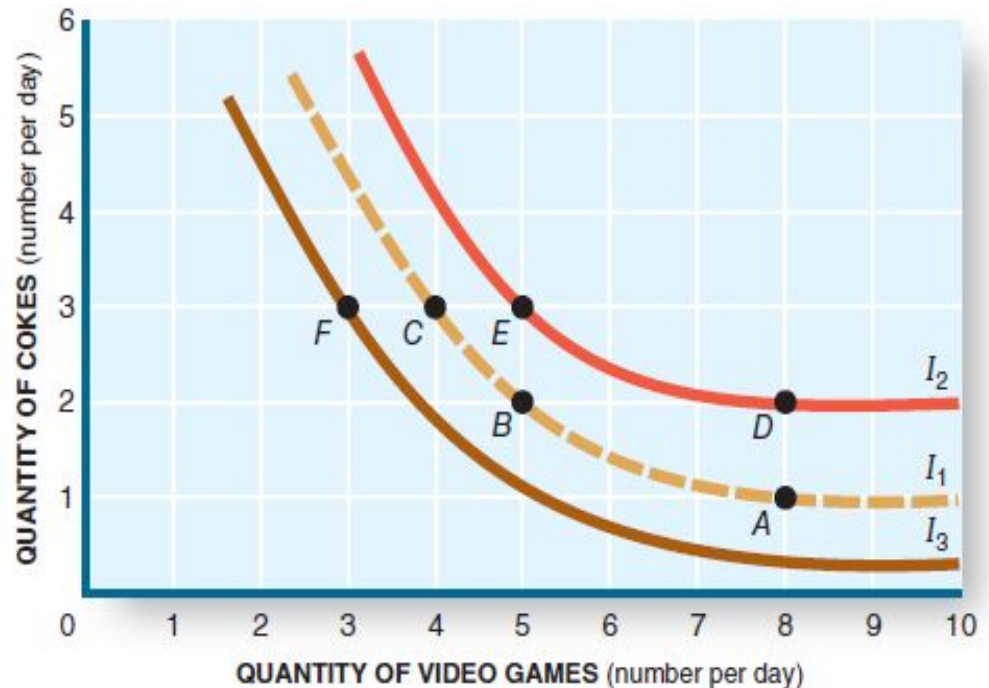
# Indifference Curves

- On the graph, you have several choices between Cokes and games. The line indicates a series of combos that yield equal satisfactions.
- Since satisfactions are equal, the consumer would be indifferent as to which choice he or she would make.



# Indifference Curves

- The further away from the origin, the more total utility there is.
- Curve  $I_2$  yields more total utility than curve  $I_1$ .
- Curve  $I_3$  yields less total utility than curve  $I_1$ .
- This collection of curves is called an indifference map.



# The Budget Constraint

- We operate with limited income – that is, on a budget. This limits what we can buy.
- This slide shows two budgets and what they can buy: one with \$1 and one with \$2.



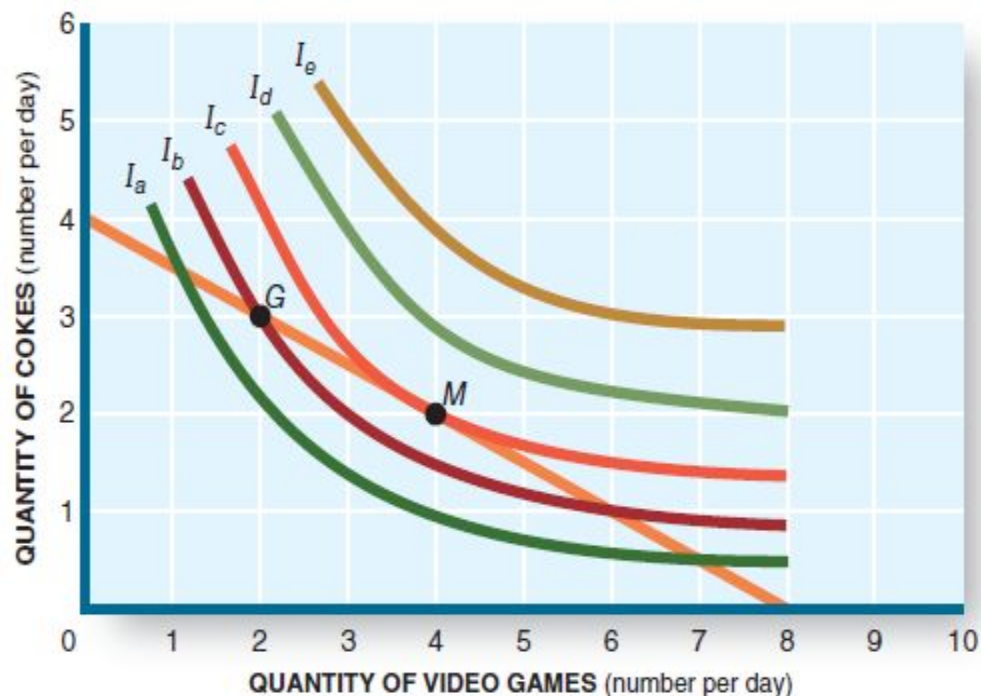


# Let's Take a Different Look

*Connect the Dots: Consumer Choice &  
Indifference Curves*

# Optimal Consumption

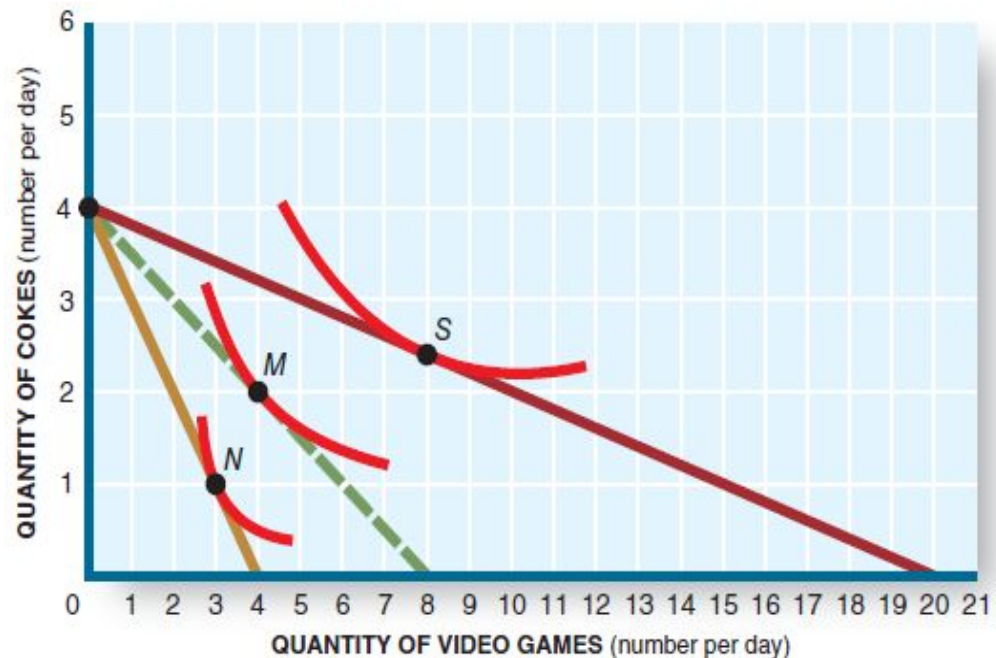
- The objective is to reach the highest indifference curve that is compatible with our budget constraint.
- That occurs at point **M**. No other affordable combination lies on a higher indifference curve than  $I_c$ .
- For example, combination **G** lies on a lower indifference curve.



# Relation to the Demand Curve

Whenever the price of a good changes, the budget constraint shifts.

- With \$2 to spend, increase the price of a video game from \$0.10 to \$0.25 to \$0.50 reduces the maximum number of games that can be purchased from 20 to 8 to 4.
- The **optimal consumption** of games shifts from **S** to **M** to **N**.

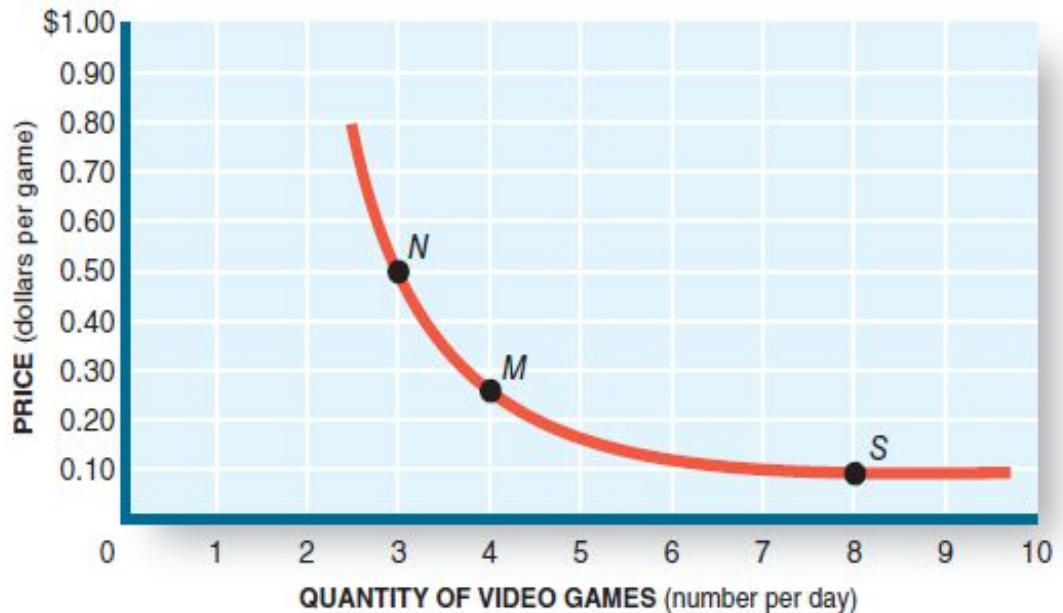




# Relation to the Demand Curve

We can construct the demand curve for games, using points **N**, **M**, and **S**.

- As price falls, quantity demanded rises, and vice versa.



# Practice Question

Use the indifference curves and the budget lines in Figure 19.3 to answer the indicated question. Assume the price of Y is \$1 per unit. If the price per unit of good X is \$1, the optimal consumption is found at point

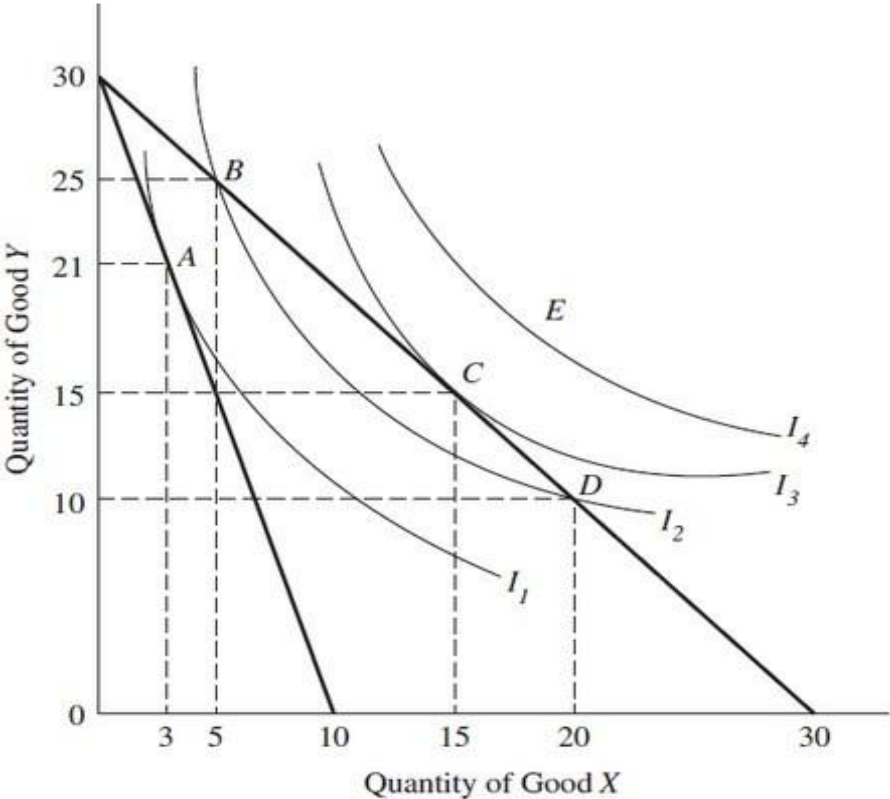


Figure 19.3

- a) B
- b) D
- c) E
- d) C

# Practice Question - Answer

Use the indifference curves and the budget lines in Figure 19.3 to answer the indicated question. Assume the price of Y is \$1 per unit. If the price per unit of good X is \$1, the optimal consumption is found at point

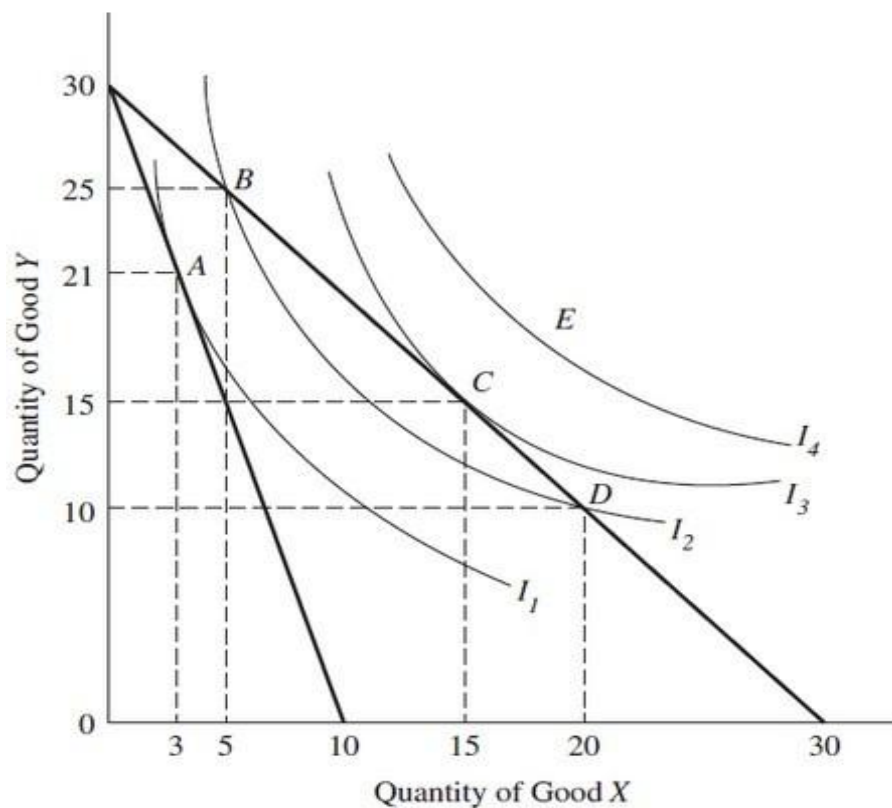


Figure 19.3

- a) B      b) D      c) E      **d) C**