Discussion 01

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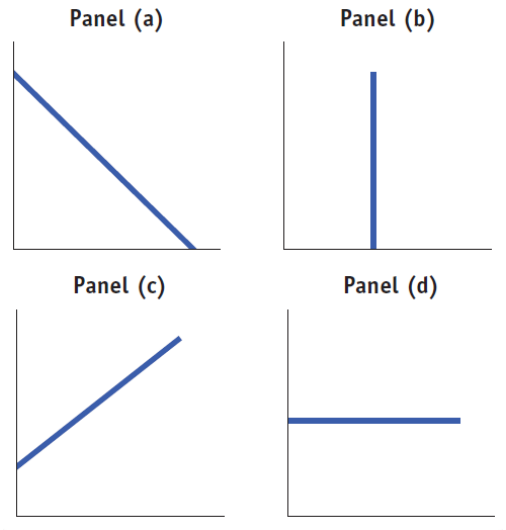
Introduction to Macroeconomics

August 8, 2023

Reading list: Chapter 2 - Appendix - Graphs in Economics

1. Curves: (Positive and Negative Linear Relationship)
2. Calculate the Area Below or Above a Curve
3. Time-Series Graph
4. Calculate percent change and the meaning of percent change

Question 1



Study the four accompanying diagrams. Consider the following statements and indicate which diagram matches each statement. Which variable would appear on the horizontal and which on the vertical axis? In each of these statements, is the slope positive negative, zero, or infinity?

a). If the price of movies increases, fewer consumers go to see movies.

b). More experienced workers typically have higher incomes than less experienced workers.

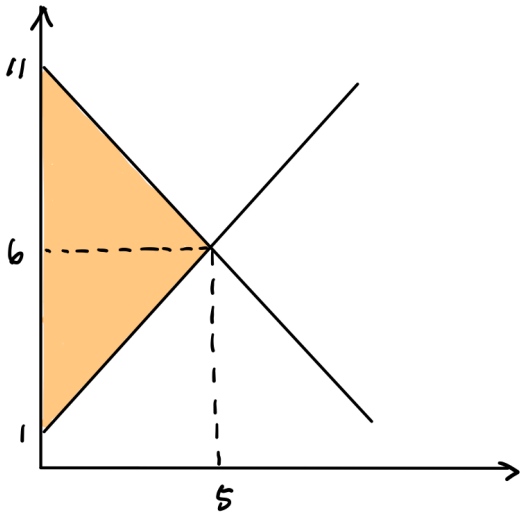
c). Whatever the temperature outside, Americans consume the same number of hot dogs per day.

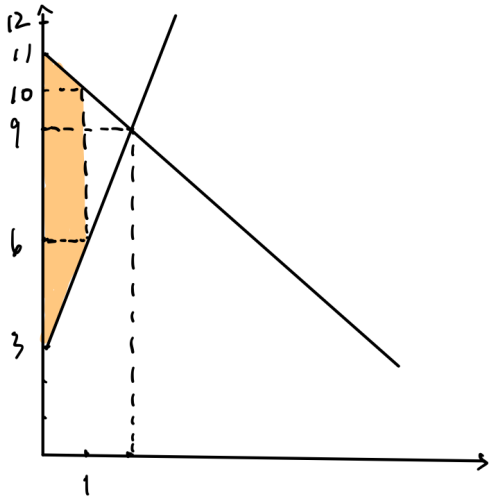
d). Consumers buy more frozen yogurt when the price of ice cream goes up.

e). Regardless of its price, Americans buy the same quantity of salt.

Question 2

1. Find the slople for the line that goes through the points (x=2,y=8) and (x=6,y=16).
2. For the two graphs below, calculate the areas of the shaded regions.





Question 3

Please answer the following questions:

1. In 1960, Cambodia had a population of 5.7 million people. Today, it has a population of 17.0 million people. What was the growth rate of the Cambodian population over the past 60 years? (Hint: "Growth rate" indicates percent change.)

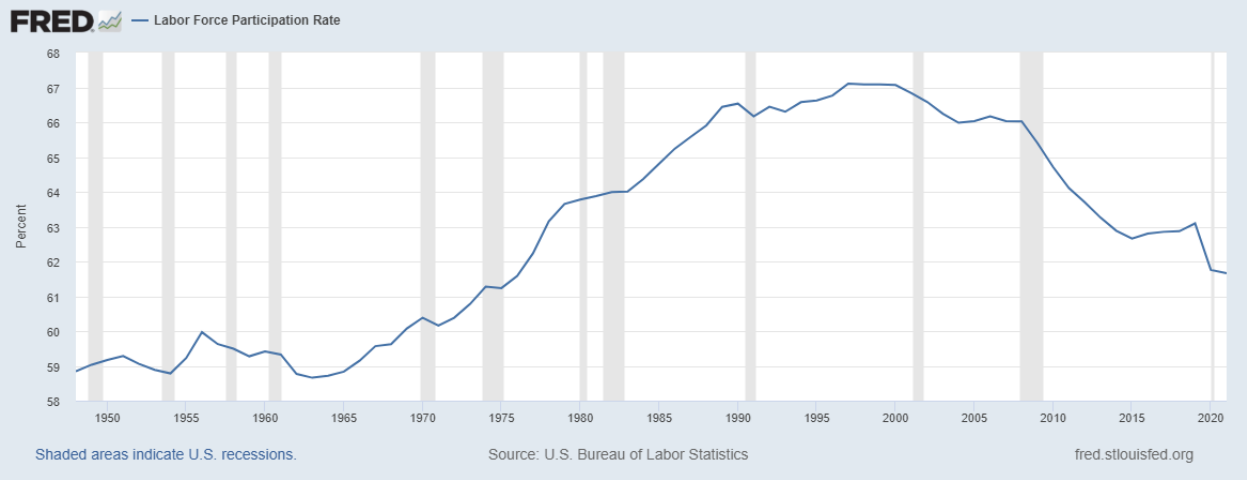
2. In the first half of 2020, the average price of houses in the US fell from $383,000 to $374,500. What was the percent change in the average price of houses in the US?

3. On January 1, 2022, the minimum wage in Buffalo increased from $12.50 per hour to $13.20 per hour. What was the growth rate of Buffalo's minimum wage?

Question 4

Given the graph of the US labor force participation rate below, identify a time period during which

1. The labor force participation rate was increasing at an increasing rate.
2. The labor force participation rate was increasing at a decreasing rate.
3. The labor force participation rate was decreasing at an increasing rate.
4. The labor force participation rate was decreasing at a decreasing rate.



Question 5

Given the graph of Japanese inflation below, identify time periods during which prices were

a. Rising, but slowing down (disinflation - percent change is positive but decreasing).

b. Falling (deflation - percent change is negative).