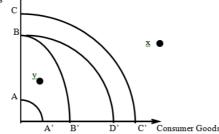
## Week #2 Worksheet Solutions - Shift in PPC ~ Change in Income

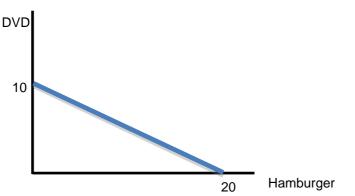
**1.** BB' represents a country's current production possibilities curve.



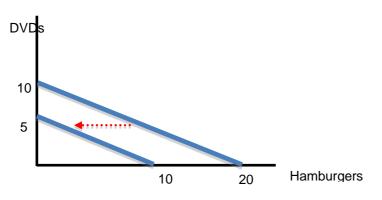
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- **a.** Suppose massive new sources of oil and coal are found within the economy and there are major technological innovations in both sectors of the economy. Which curve in the diagram would represent the new production possibility curve? (Indicate the curve you choose with two letters.)  $\rightarrow$  CC'
- b. Suppose that a new government comes into power that forbids the use of automated machinery and modern production techniques in all industries. Which curve in the diagram would represent the new production possibility curve? (Indicate the curve you choose with two letters.) →AA'
- **c.** If BB' represents a country's current production possibilities curve, what can you say about a point like x? →Unattainable given the current technology and resources.
- **d.** If BB' represents a country's current production possibilities curve, what can you say about a point like y? **→Productively inefficient.**
- **2.** True or False: Consider the production possibilities curve for airplanes and beer. A technological advancement in the production of airplanes allows the economy to produce more beer at a fixed level of production of airplanes. → **True**.
- **3.** If country A specializes in the production of wheat and country B specializes in the production of coal, and if both countries trade and benefit from trade, then it must be true that
  - **a.** country B has an absolute advantage in the production of coal.
  - **b.** country A has an absolute advantage in the production of wheat.
  - **c.** country A has a comparative advantage in wheat and country B has a comparative advantage in coal.
  - **d.** All of the above.
- **4.** Pick the BEST answer. Assume that, for Canada, the opportunity cost of producing 1 television set is 2 bushels of wheat. Assume that, for the United States, the opportunity cost of producing 1 bushel of wheat is 2 television sets. All other things being equal,
  - **a.** the United States should export televisions and import wheat.
  - b. Canada should export wheat and import televisions.
  - **c.** the United States should export wheat and import televisions.
  - **d.** Canada should export televisions and import wheat.
  - e. the US should export televisions to Canada and import wheat from Canada

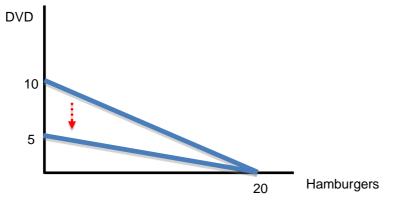
- **5.** Assume you have an income of \$60 that you spend on hamburgers and DVD's. Hamburgers cost \$3 and DVD's cost \$6.
  - **a.** Draw your budget line below with hamburgers on the x-axis and DVD's on the y-axis



- **b.** What is the opportunity cost of DVD's? <mark>2 hamburgers.</mark>
- **c.** What is the opportunity cost of hamburgers? <sup>1</sup>/<sub>2</sub> DVD.
- **d.** Suppose that your income decreased to \$30. Draw your new budget line.



**e.** Going back to a budget of \$60, suppose the price of DVD's doubles. Draw your new budget line.



f. At the new price, what is the opportunity cost of DVD's? Hamburgers? The opportunity cost of DVDs is 4 hamburgers. The opportunity cost of hamburgers is ¼ DVD.

- **6.** Barbara spends her annual income entirely on college courses and clothing. Which of the following can decrease Barbara's opportunity cost of taking another college course?
  - **a.** An increase in her annual income.
  - **b.** A decrease in her annual income.
  - **c.** A 10-percent decrease in the prices of both college courses and clothing.
  - **d.** An increase in the price of clothing while the price of taking college courses remains fixed.
  - **e.** An increase in the price of taking college courses while the price of clothing remains fixed.