1. A nation with fixed quantities of resources is able to produce any of the following combinations of capital goods and consumer goods:



These figures assume that a certain number of previously produced capital goods are available in the current period for producing consumer goods.

1. Using the data in the table, graph the PPF. (1 point)
2. Does the principle of “increasing opportunity cost” hold in this nation? Explain briefly. (2 points)
3. If this country chooses to produce both consumer goods and capital goods, what will happen to the PPF over time? Why? (2 points)

Now suppose that a new technology is discovered that allows twice as many consumer goods to be produced with each capital good.

1. Illustrate (on your original graph) the effect of this new technology on the production possibilities frontier. (1 point)
2. Suppose that before the new technology is introduced, the nation produces 2 capital goods. After the new technology is introduced, the nation produces 18 consumer goods. What is the effect of the new technology on the production of capital goods? (Give the number of capital goods before and after the change.) (1 point)
3. Suppose you have a choice of working full-time during the summer or going full-time to summer school. Summer tuition and books are $2,200. If you worked, you could make $7,000. Your rent is $1,000 for the summer, regardless of your choice. What is the opportunity of your choice of going to summer school? (1 point)
4. What would a straight-line production possibilities frontier between grape juice and apple juice on Fruity Goodness Orchards say about opportunity costs? (1 point)

1. Use economics to explain why people smoke even though they know smoking is not good to their health? (2 points)