Example 1

The above picture describes the production possibilities set for North Kilttown, a community which can produce either kilts (K) or pounds of haggis (H) every day.

a) At which of the labeled points is it feasible for North Kilttown to produce?

b) At which of the labeled points is North Kilttown producing efficiently?

c) If North Kilttown is currently producing at point A, what is the opportunity cost of producing 60 more pounds of haggis?

d) If North Kilttown is currently producing at point C, what is the opportunity cost of producing 20 more kilts?

e) What happens to the opportunity cost of producing more kilts as we move from point C to point A? Why might this be happening?

f) A new technology emerges (say, a sewing machine) which allows residents of North Kilttown to make kilts with half as much labor time, but does not affect haggis production in any way. Draw the new PPF after the invention of this technology on the graph below. The PPF from before the invention of this technology is drawn for your reference.
Example 2
The US and Japan both produce cars and wheat, and are considering entering a trade agreement. The US can produce 400 bushels of wheat per year, or 200 cars per year, or any combination lying on the line between these two points. Similarly, Japan can produce 100 bushels of wheat per year, or 150 cars per year, or any combination lying on the line between these two points.

a) Graph the PPF for each country on the axes below.

b) What is the opportunity cost of producing 1 car in each country?

c) What is the opportunity cost of producing 1 bushel of wheat in each country?

d) Which country has the absolute advantage in the production of each good?

e) Which country has the comparative advantage in the production of each good?

f) If the US and Japan were to trade these two goods, which country would export cars?

g) What is the range of prices at which the countries could come to a trade agreement? (that is, if the US is exporting cars, what is the maximum price Japan would be willing to pay per car, and what is the minimum price for which the US would be willing to sell a car?)

h) Can we determine a specific price at which these two countries will trade? If so, what is it? If not, what does the answer depend on?