

EC111 Introduction to Economics: Class Exercises 1 (week 3)

1. Questions on the production possibility frontier:

- a) What does it mean for the PPF to be concave and why would this happen?
- b) What does it mean to be inside the PPF and how can this happen?
- c) Suppose an economy produces only guns and butter. How does technical progress in the production of guns affect the PPF? How does technical progress in the production of butter affect the PPF?
- d) How does an increase in labour supply affect the PPF?
- e) How does a decrease in the rate of unemployment affect the PPF?

2. Consider an economy which produces only beer and pizza. The resources of the economy consist of 100 workers and a brewery. Each worker can produce 10 pizzas per day. In the beer industry, each worker can produce 5 pints of beer per day.

- (a) Draw the production possibility frontier. Explain the difference in the shape of the PPF as compared to the ones drawn in the lecture.
- (b) How many workers are there in each industry when the economy is producing 400 pizzas?
- (c) What is the opportunity cost of a pizza when the economy is producing (i) 400 pizzas, (ii) 600 pizzas?

Now suppose that the maximum capacity of the brewery is reduced to 250 pints per day. Any extra beer has to be produced by home brewing in which a worker can only produce 2 pints per day.

- (d) Draw the new production possibility frontier.
- (e) What is the opportunity cost of a pizza when the economy is producing (i) 400 pizzas, (ii) 600 pizzas?

Terms to review and understand from week 2 lectures:

production possibility frontier
opportunity cost
absolute advantage; comparative advantage
price taker
excess supply; excess demand
rationing.