

ECON 102: Microeconomics

Quiz 1: Production Possibilities Frontiers

Directions: Answer the following questions on a separate sheet of paper. Turn in only the separate sheet with your work and answers. Keep this sheet.

The great hypothetical sovereign nation Farmland can grow corn to be used for food or to be used for ethanol. The following table presents hypothetical production possibilities when all resources are used efficiently.

Corn	10	9	7	4	0
Ethanol	0	1	2	3	4

1. Draw the production possibilities for corn and ethanol. Label the parts of the graph that are attainable but not efficient, most efficient, and not attainable.
2. What happens to the opportunity cost of ethanol as the production of ethanol increases?
3. What happens to the opportunity cost of corn as the production of corn increases?
4. What is the opportunity cost of the third unit of ethanol?
5. What is the opportunity cost of the tenth unit of corn?
6. Show what would happen to the production possibilities curve if there was a drought.
7. Show what would happen to the production possibilities curve if governments stop encouraging the use of bio-fuels such as ethanol.