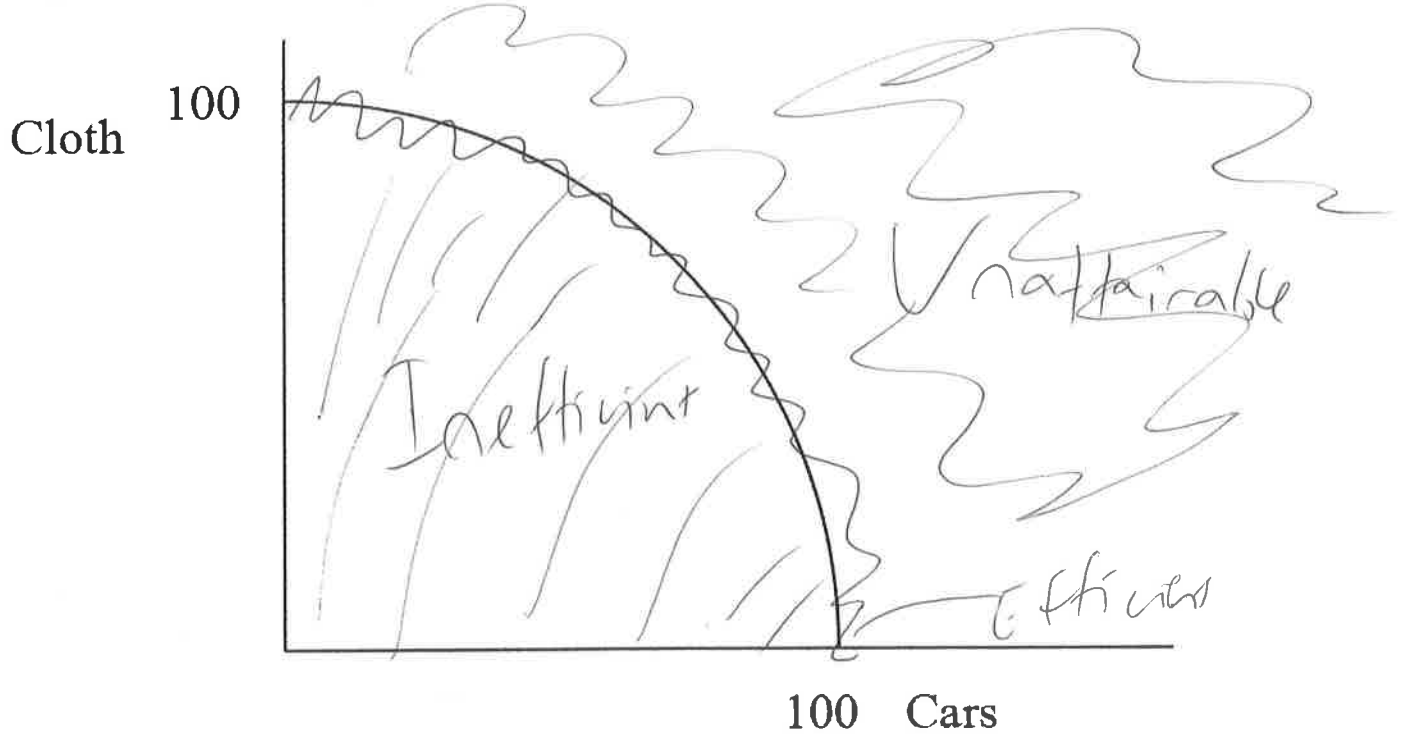# EC 11

Problem Set 1 – Due 2/7

1. Assume the following production possibilities frontier (PPF) exists for the United States:

Cloth 100

Inefficient
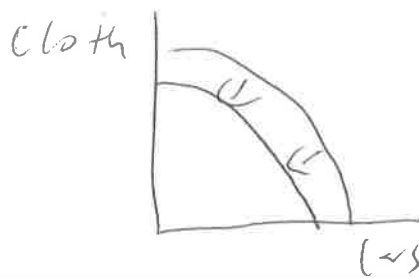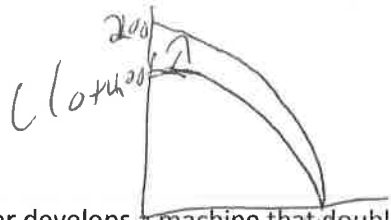
Unattainable

Efficient

100 Cars

(a) Label the efficient, inefficient and unattainable areas.

(b) Give a brief explanation of why the PPF is "bowed out".

Opp. costs change as resources shift. Moving from all cloth toward cars, the opp. cost of cars starts very low as the first cars are produced. Opp. cost of cars increases as the number of cars does.

(c) Graphically show what happens to the PPF due to the following events: i) 25 million Americans immigrate to warmer countries after this severe winter.
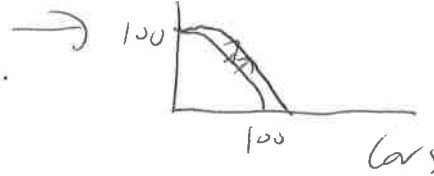
Cloth

Cars

Clooth 200

ii) A famous engineer develops a machine that doubles the production of cloth. Would it matter if cloth were used in the production of cars? Cars

Yes, it so more cars could be prob-ud as well,

iii) An enormous supply of iron ore is discovered in South Dakota (assume iron is not used in the production of cloth.)
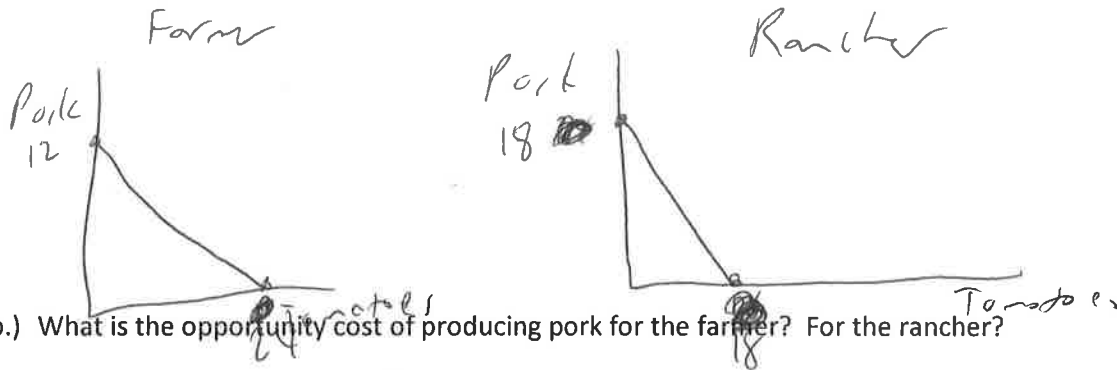
→ 100

iv) The United States goes into a severe recession.

100 cars

2.)

	Labor Hours Needed to Make 1 Pound of		Pounds Produced in 24 Hours	
	Pork	Tomatoes	Pork	Tomatoes
Farmer	6	3	4	8
Rancher	4	4	6	6

a.) Draw the PPFs for the Farmer and Rancher assuming that each has 72 hours available to them.

Farmer

Pork 12

Rancher

Pork 18

b.) What is the opportunity cost of producing pork for the farmer? For the rancher?

Farmer - 2 tomatoes

Rancher - 1 tomato

c.) If the farmer and rancher devote half of their time to each crop, how much could each produce?

Farmer - 6 pounds of pork, 12 pounds of tomatoes.

Rancher - 9 pounds of each.

3.) Explain the difference between absolute advantage and comparative advantage. Which is more important in determining trade patterns, absolute advantage or comparative advantage? Why?

Absolute advantage is the ability to produce at a lower cost. Comparative - lower opp. cost. Comparative advantage is more important to trade as it determines the ability to specialize.