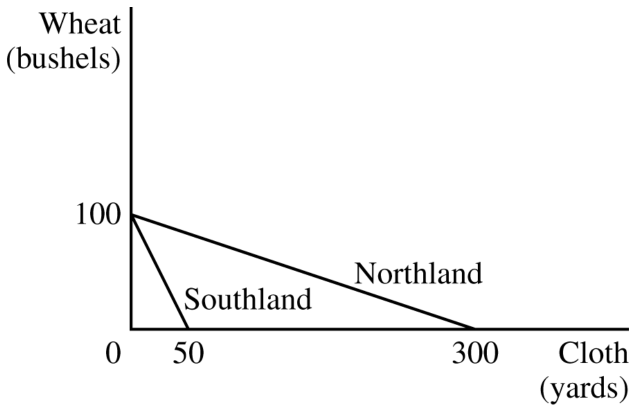
2. The graph shows the production possibilities curves for Northland and Southland.



(a) Which country has a comparative advantage in producing wheat? Explain using numbers.

(b) Identify a specific number of yards of cloth that could be traded for 10 bushels of wheat and would be mutually beneficial to Northland and Southland.

(c) Southland's maximum possible output of wheat falls from 100 bushels to 75 bushels. Assuming no other changes, will Southland have a comparative advantage in producing cloth? Explain using numbers.

(d) Turnips are produced in a perfectly competitive market in Alderia, a third country, which does not engage in international trade. Runoff from turnip fields pollutes Alderia's rivers, hurting its residents.

(i) Does the turnip market equilibrium result in an efficient allocation of resources? Explain using marginal analysis.

(ii) In an effort to reduce pollution, Alderia's government imposes a lump-sum tax on turnip production. What will be the impact on the turnip market equilibrium price and quantity in the short run?

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

3. Nirali is a student at the University of Ainsley. She has 5 hours to study for two exams today. The tables below show Nirali's expected scores given the amount of time she studies for each exam.

Number of Hours Spent Studying Microeconomics	Expected Score on Microeconomics Exam (100-point scale)
5	100
4	96
3	90
2	82
1	60
0	0

Number of Hours Spent Studying History	Expected Score on History Exam (100-point scale)
0	0
1	40
2	60
3	72
4	77
5	80

(a) Nirali spends 3 hours studying microeconomics and 2 hours studying history. Calculate her gain from the second hour spent studying history.

(b) Calculate Nirali's opportunity cost of the second hour spent studying history.

(c) Assume Nirali increases the time she allocates to studying history. What happens to the opportunity cost of studying history? Explain.

(d) Assume that Nirali has a goal of maximizing the sum of her test scores (the score on microeconomics plus the score on history). How many hours should she study for each exam?

(e) Nirali learns that her tennis practice has been canceled, freeing up an additional hour for studying. Given your answer to part (d), will Nirali allocate the additional hour to studying microeconomics or to studying history to maximize the sum of her test scores? Explain using marginal analysis.

STOP

END OF EXAM