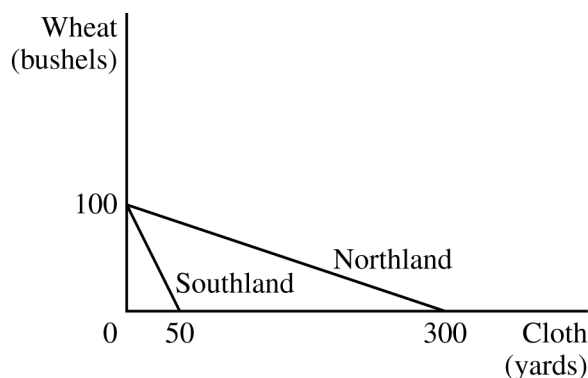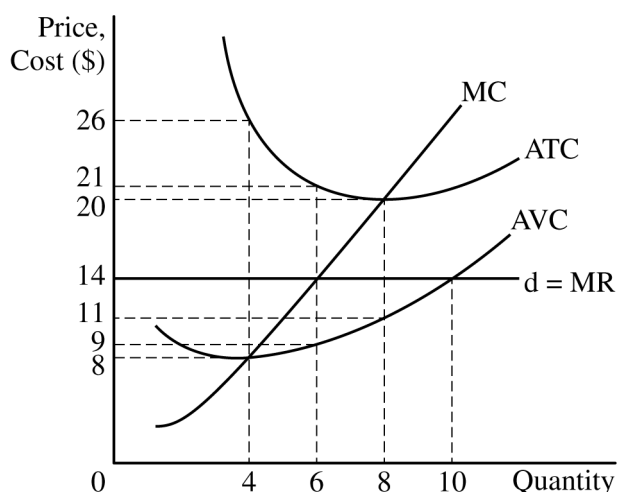2. The graph shows the production possibilities curves for Northland and Southland.

(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.

GO ON TO THE NEXT PAGE.

3. The graph provided shows the demand (d), marginal revenue (MR), average total cost (ATC), average variable cost (AVC), and marginal cost (MC) curves for Hansel Hangout, a typical profit-maximizing firm in a perfectly competitive market producing Good X.

(a) Calculate Hansel Hangout's total fixed cost. Show your work.

(b) Identify the price and Hansel Hangout's profit-maximizing quantity of Good X.

(c) Calculate Hansel Hangout's economic profit at the quantity identified in part (b). Show your work.

(d) As the market for Good X adjusts to the long-run equilibrium, what will happen to the price of Good X? Explain.

(e) Assume the cross-price elasticity of demand between Good X and Good C is positive. Given the change in the long-run price of Good X in part (d), will the quantity demanded of Good C increase, decrease, or remain the same? Explain.

_____

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.

Question 2: Short   5 points

(a)	State that Southland has a comparative advantage in producing wheat and explain that the opportunity cost of producing one bushel of wheat in Southland is 1/2 yard of cloth, which is less than the opportunity cost of producing one bushel of wheat in Northland, which is 3 yards of cloth.	**1 point**
(b)	Identify any specific number between 5 and 30 yards of cloth.	**1 point**
(c)	State no and explain that Southland's opportunity cost to produce one yard of cloth is 1.5 bushels of wheat, which is greater than Northland's opportunity cost of producing cloth, which is 1/3 of a bushel of wheat.	**1 point**
(d)(i)	State no, the market results in an inefficient allocation of resources and explain with **ONE** of the following: • The negative externality causes the marginal social cost to be greater than the marginal social benefit (MSC > MSB) at the market equilibrium. • The negative externality in production causes the marginal social cost to be greater than the marginal private cost (MSC > MPC) at the market equilibrium.	**1 point**
(ii)	State that a lump-sum tax will not change the market equilibrium price and quantity in the short run.	**1 point**
	Total for part (d)	**2 points**
	Total for question 2	**5 points**