Transport Costs Exercise

1. Total, average and marginal products and costs

Fixed costs: 100,000

Price of a variable factor 50,000

You should round all figures to two decimal places.

Labor	Output (000s)			Costs				
units	TP	AP	MP	TFC	TVC	TC	ATC	MC
0	0							
1	50							
2	110							
3	180							
4	260							
5	350							
6	420							
7	480							
8	530							
9	570							
10	590							

Once you have completed this table, you should use your calculations to answer the following questions:

A. At what level of output should the firm operate at?
B. What is the most efficient level of output in terms of:
    a. Technical efficiency?
    b. Cost efficiency?
    c. In terms of measuring the firm's efficiency, which of these two measures should be used and why?

2. Economies of scale in railway operation

Reexamine case study 5.3 and answer the following questions:

A. Briefly outline your understanding of the traditional and revisionist views of railway economics.
B. List what you believe to be the main sources of economies of scale in the rail industry. Once you have produced this list, indicate which arise as a result of returns to scale and which are cost savings.
C. What on the other hand do you believe are the main sources of diseconomies of scale in larger integrated railways?
D. If you were a rail industry regulator in Britain today, what other factors apart from economies of scale would you take into account when deciding on the number of operators to have in the market?