

Fun question 😊

Perfect competition in bus markets

If we assume that a given bus market is in perfect competition which charges a flat fare of £1, and if the formula for the total demand (in thousands) in the market is given by the equation:

$$Q_d = 250 - 60P$$

where Q_d is the quantity demanded in thousands at a given price P .

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a) What is total market demand at the £1 flat fare?

b) If the market is shared equally by 4 firms, what is the number of passengers carried by each company?

c) If the cost per vehicle kilometer is £1.60, average utilization 20 passengers per vehicle kilometer and average trip distance 10 kilometers:

- I. What is the level of bus kilometers required to service this market?
- II. What profits are being made?
- III. What type of profit is this, normal or abnormal?
- IV. What is the cost per passenger carried (as opposed to the cost per vehicle kilometer)?

- As this is perfect competition, new firms may enter the market and compete these profits away. What price therefore will ensure that only normal profits are made?