1. The demand for your product has been estimated to be : Qx=7880 -4Px -2Py +Pz - .1M.

The relevant price and income data area s follows: Px=10, Py=15 , Pz=50 , M=40000

a) Which goods are substitutes for X? Which are complements?

b) Is X an inferior or a normal good?

c) How much X will be purchased?

2. You are the manager of a firm that sells output at a price of $40 per unit. You are interested in hiring a new worker who will increase your firms output by 2000 units per year. Several other firms are also interested in hiring this worker.

A) What is the most you should be willing to pay this worker to come to your firm?

B) What will determine whether or not you actually have to offer this much to the worker to induce him to join your firm?

You are a manager in a perfectly competitive market. The price in your market is $35. Your total cost curve is C(Q) = 10 +2(Q) + .5Q^2.

A) What level of output should you produce in the short run?

B) What price should you charge in the short run?

C) Will you make profits in the short run?

D) What will happen in the long run?