

Tutorial 4 - Pricing

1. Discussion question

Read the following articles that are available on Canvas:

Daripa and Kapur (2001), 'Pricing on the internet', *Oxford Review of Economic Policy* 17(2), pp. 202-16.

Nikas (2015), "Now prices can change from minute to minute" from *Wall Street Journal*.

Now consider the following questions:

- The article by Daripa and Kapur (2001) is somewhat dated, but nonetheless it is instructive as to how the internet might change 'pricing' behaviour. What are some of the key behaviours they identify? Have they come to fruition? Why or why not?
- What does the article by Nikas highlight has happened to pricing behavior of firms in light of the possibilities that are available from the internet?

2. Suppose that the demand curve for telephone services is given by the following:

$$P = 20 - Q$$

If a telecommunications firm uses quantity discounts to maximise profits, what is the price and quantity associated with each block?

Hint: Assume that there are only two blocks. That is, for this question the firm charges one price for the first Q_1 units and a different (lower) price for the second set of units.

3. Assume that a travel agency is selling holidays to Europe. Those holidays consist of an airfare and or a hotel. Assume there are three customer types with valuations given by the following:

<i>Customer</i>	<i>Airfare</i>	<i>Hotel</i>
1	100	800
2	500	500
3	800	100

Finally, assume that the marginal cost of the airfare and the hotel is \$300.

What are the optimal prices of the air fare and the hotel if there is no bundling?

If the airfare and hotel are sold as a bundle, what is the optimal price of the bundle?

If optional bundling is used, what are the optimal prices of the airfare, the hotel and the bundle?

4. Consider a newspaper that creates an online portal through which to sell stories. Assume that there are two types of buyers, students and non-students. Each as the following demand where q represents the number of stories read each month:

$$P_N = 100 - q$$

$$P_S = 80 - q$$

Further, assume that the marginal cost of producing stories is zero.

- (a) If the newspaper can identify different types of buyers, what price will they charge students and non-students for an all or nothing deal? That is, one in which a package of a maximum number of stories is offered at a fixed price per month?
- (b) What is the most that students will pay for reading 80 articles per month? How much will non-students pay to read up to 80 articles per month?
- (c) What is the maximum price that the newspaper could charge for the 100 articles per month if it wanted the non-students to prefer this to the 80 article per month option?
- (d) Suppose that only 60 articles per month are included in the student subscription, what is the maximum it could charge for this and still get students to pay? How much surplus would a non-student get from the student package?
- (e) How much could the newspaper charge for the 100 article package and still ensure that non-students buy it rather than the student package?
- (f) Which set of offers (the 60 and 100 article subscriptions, or the 80 and 100 article subscriptions) offers the highest profits?