# 600541 Applied Business Economics, 2021–22    Tutorial 3

If you wish to discuss the tutorial questions please come to my office hours.

1. A restaurant has three types of customers. A third of its customers, Type A, are willing to spend £5 on an appetizer but only £2 on a dessert. Another third, Type B, are willing to spend £3.50 on an appetizer and £3.50 on a dessert. The remaining third, Type C, are willing to spend only £2 on an appetizer but £5 on a dessert. All three types are willing to spend £10 on the main course. It costs the restaurant a constant £2 to prepare an appetizer or a dessert, and £7 to prepare the main course.

   Which is optimal for the restaurant, to offer appetizers and desserts à la carte (with separate prices on the menu), or to offer them only as a complete meal, tied in with the main course?

2. Find some example(s) of pure bundling and some example(s) of mixed bundling. For each example, either take a photo/screenshot and bring it to class, or note down the products and the price(s).

3. Consider the following adult ticket prices for Sea Life Manchester and Legoland Discovery Centre Manchester:

   - a ticket for one of the attractions has a walk up price of £19.50,
   - a combi ticket for both attractions has a walk up price of £29.50.
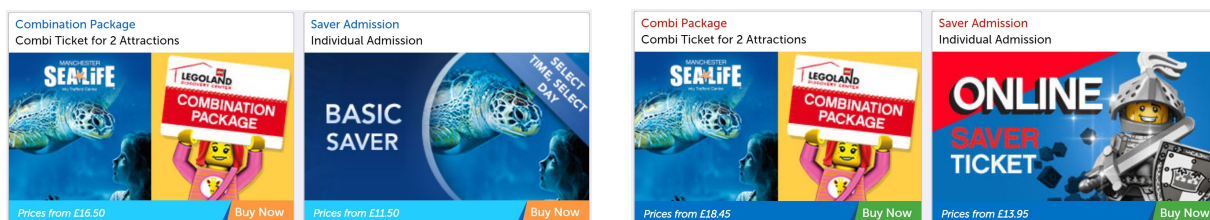


visitsealife.com/manchester/tickets/    manchester.legolanddiscoverycentre.co.uk/tickets/

Figure 1: Note that the prices referred to after "prices from" are the online prices for children 3–17, not the walk up price for adults.

   Suppose there are three types of consumers in equal proportions and that the cost of an extra entrant to either attraction is zero. Find values of a–f such that mixed bundling is strictly more profitable than selling separately or pure bundling (combi tickets alone), and such that the optimal prices match the prices above.

| Type | Sea Life | Willingness to pay Legoland | Together |
|---|---|---|---|
| 1 | a | b | a + b |
| 2 | c | d | c + d |
| 3 | e | f | e + f |

4. If we have time, we will discuss the results of the Bertrand Market game from the lecture.