

## Tourism Policy and planning

### Exercise 2

1. (A) The overnight stays demanded by AIRBNB has increased by 12% in response to a 15% increase in price of Hotels in Spain. Calculate the cross elasticity of demand and tell whether the product pair are substitutes or complements. Why?

(B) The Barcelona tourist board announced an increase in the price of all its cultural sites such as the Picasso museum, Gaudi's La Pedrera, etc. Average price of a complete visit to the town moved up from 100 EUR to 200 EUR. A consultant working with the tourist board in Catalonia later conducted a survey and suggested that over the year, the overnight stay demand for the cultural sites in Zaragoza (near Barcelona) also decreased from 2,600 ticket per month to just 1400 tickets. Calculate the cross elasticity of demand and tell why the new prices have reduced demand in Zaragoza.

2. Two complementary businesses (Blue Panorama and the Hotel board in Santorini Island) offer flight and accommodation for Santorini, but do not coordinate their activities, i.e. each maximizes profits separately. Tourists need a flight and a one week stay at price  $p_f$  and  $p_h$  with the total price of their trip equal to  $v = p_f + p_h$ . Total demand from Italy during the month of June is  $D = 6000 - 3v$  trips.

Write out the profit function given the above information.

What is the optimal price set for a flight ticket by Blue Panorama? Maximize their profits to find out.

What would be the optimal price set for a week accommodation by the Santorini Hotel board? (hint: note that the two companies are symmetric and have identical actions).

Calculate the total profits for each firm.