

## Tourism Policy and planning

### Exercise 4

You are trying to maximize tourism expenditure for your destination. You have to use the right holiday price strategy to do this. You know that a higher price has two effects on expenditure. It directly increases tourism spending so increases your revenue. But it indirectly reduces overnight stays (demand) so this could also reduce the overall expenditure.

Overall expenditure is equal to  $S=vN$ , where  $v$  is the price and  $N$  is the overnight stays.

$$N = 80-8v$$

Take the derivative of  $S$  with respect to  $v$  using the chain rule to understand the two components above.

(i) What is the positive effect of a change in price on tourism expenditure?

(ii) What is the negative effect of a change in price on tourism expenditure?

Now use the second term to get the elasticity (hint: multiply and divide  $v(dN/dv)$  by  $N$ )

Write out  $dS/dv$  in terms of elasticity

What is the optimal price you have to set to maximize tourism expenditure?

If demand shifts up so that now  $N = 102 - 8v$ , what would be the elasticity if the price remains the same?

What does this mean and what do you think can be done to improve the situation and increase tourism expenditure?

What is the new optimal price?

Also Show the process on a graph.