



## **PROPOSED EXERCISES UNIT 5**

- 1) Using the values of the variable *Network hours* (Number of hours per week in social networks), answer to the following questions (sheet 'Social network hours'):
  - a) Analyse the shape (skewness and kurtosis) of the distribution.
  - b) Use a box plot to present graphically this variable and comment on the result: Are there any outliers? Do the values of the variable follow a symmetric distribution or are they skewed? Compare the result with the shape observed in the graphic presentation obtained in practice 1.
  - c) Are the values of the average, median and mode in accordance with the shape identified in the previous questions?
- 2) Spanish National Statistics Institute collected the data relative to the size of households in Spain (2015) that are shown in the table (Sheet 'Households')

Size of household	Percentage of
(number of people)	Households (%)
1	25
2	30.6
3	21
4	17.6
5	4
6	1.8

- a) What is the representativeness of the average size of households in 2015?
- b) In 2015, the average size of a household in Europe was 2.3 people with a standard deviation of 1.83 people. Where was the size of households more homogeneous, in Spain or in Europe?
- c) In 2015, where was a household with 6 people greater in relative terms, in Spain or in Europe?