For many years the top-selling luxury car in North America was the Cadillac. It reigned from 1950 to 1998. In 2000, Cadillac sales dropped to half of the sales in 1978. It appeared that it was only popular with older males. Younger males seeking luxury cars shopped elsewhere. Although Cadillac made $700 million in 2000, the company felt it must pick up sales to younger males. To put Cadillac back on top, it is necessary to understand who is buying. A survey of luxury car buyers was undertaken. The following information was gathered from random samples of recent buyers of luxury cars.

|  |  |
| --- | --- |
| **Column 1** | **Luxury Car** |
| 1 | BMW |
| 2 | Cadillac |
| 3 | Lexus |
| 4 | Lincoln |
| 5 | Mercedes-Benz |

File CO4-03 contains the ages of the buyers, their household incomes, and the number of years of education. In the data set columns 1 to 5 contain the ages of the owners of the five luxury cars, columns 6 to 10 show their household incomes, and columns 11 to 15 store their years of education.

a) Use statistics to describe the ages, household incomes, and education of the five groups of car buyers.

b) Use box plots to compare the ages, household incomes, and education of the five groups of car buyers.

c) Write a brief report describing your findings.