Académie de Toulouse – sections européennes – session 2014

Subject n°24

STATISTICS

Please do not write on the exam paper, and do not forget to give back the examination paper at the end of the test.

The following table gives the portion (in %) devoted to organic farming out of the total agricultural area in some EU countries in 2003 and 2012 :

	2003	**2012**
Belgium	1.7	1.4
France	1.9	*a*
Germany	4.3	5.8
Ireland	0.7	1.1
Italy	7	8.9
Luxembourg	2.3	2.7
Netherlands	2.2	2.6
Portugal	3.2	6.1
Spain	2.9	7.5
United Kingdom	3.9	3.4

Source: European Statistical System

1) In 2012, the total agricultural area in France was 23,767,889 hectares out of which 855,644 hectares were devoted to organic farming.
Use this information to find the value of *a*.

2) Calculate the mean of each set of data.

3) a) Compute the median, lower and upper quartile, interquartile range for each data set.

   b) On the same axis, draw a box plot for each data.

4) a) Comment on the evolution of organic farming in Europe. Can you explain this evolution?

   b) What do you think about the data from the United Kingdom?