**Second continuous activity, 20 December 2018. ARA Group (2)**

(Exercises 1 and 2) We have a database from children/adolescents with autism spectrum disorders, including several variables from the "*Child Behavior Checklist (CBCL)*" and the "*Autism Diagnostic Interview-Revised (ADI-R)*". We also have some sociodemographic and linguistic information (<http://www.uv.es/mperea/20Decembee.sav>)

Exercise 1. We want to know if the proportion of children vs. girls is the sample is similar for those who live in the city of Valencia, and for those who live in the province. That is, is there a relationship between gender and place of origin? (Copy/paste from SPSS.) Justify your answer.

Exercise 2. We was to predict the social scale of ADI-R using as a predictors the total score in CBCL (CBCL\_Total) and the language scale from ADI-R. Please answer the following questions: i) What percentage of variance of the social of ADI-R can be explained by the regression equation; ii) With the regression equation, what score ADI-R social will be predicted for the person in row 1? (Copy/paste from SPSS.) Justify your answer.

Exercise 3. We participated in a contest in which we received 5 questions, each with three alternatives. We answered all questions at random. Please answer the following questions: i) What is the probability of correctly guessing all five questions?; ii) What is the probability of correctly guessing at least one question?

Exercise 4. A reading test follows a normal distribution with mean 60 and standard deviation 12. We want to know what percentage of individuals will have a score between 70 and 90 in this test. (Copy/Paste from Excel when necessary)