

Name: .....

Neptune code: .....

Signature: .....

1. Download the file [www.inf.u-szeged.hu/~csendes/DentistData.xlsx](http://www.inf.u-szeged.hu/~csendes/DentistData.xlsx) open it in excel, and import its content into SPSS. Name the variables as Sweets, B.Teeths, and ShoeSize. Make sure that the measurement type of Sweets will be categorial, the other scale. Write here the content of the last row! 2 points
2. Determine the mean and median values for the variables B.Teeths and ShoeSize. Write the obtained values here, and explain their meaning in a few words! 2 points
3. Determine, whether there is a statistically significant correlation between the variables B.Teeths and ShoeSize! Explain the result in a few words! 2 points
4. Calculate a new variable B.Teeth2 with the command Compute according to the expression  $B.Teeths + 2 * Rv.NORMAL(0,1)$ . Check by linear regression the linear dependency between B.Teeth2 (as result variable) and B.Teeths! How to understand the result? 2 points
5. Run the one-way ANOVA to clear whether the values of the variable B.Teeths are significantly different according to the categories of the variable Sweets! Explain the result! 2 points

Optional + problem: Write what are the statistical measurement scales, and why are they important! +2 points

If an answer is longer than the given place for it, continue on the back of the sheet, but identify your answer properly.