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**Statistical Methods for Economists – Week 7**

(Questions and Tasks)

The topic: ***ANOVA***

1) Explain what is (one-way) ANOVA.

2) Explain its main purpose and application.

3) What is the determination ratio and correlation ratio?

4) What are the assumptions of ANOVA that must be satisfied?

5) What is the difference between t-test for the mean value, and ANOVA?

6) Consider the following example: Three groups of students performed a test from mathematics, and their results are shown in Table 1. Test the hypothesis that the mean test results in all three groups is the same. Use MS Excel or similar software.

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| **Group 1** | **Group 2** | **Group 3** |
| 50 | 62 | 58 |
| 46 | 67 | 62 |
| 63 | 55 | 60 |
| 52 | 60 | 59 |
| 57 | 61 | 68 |
| 61 | 62 | 60 |
| 48 | 59 | 61 |
| 49 | 58 | 66 |