Задание №1

In survey of 2000 voters 36% were found to support increasing taxes to build a new school system. Obtain the 95 percent confidence interval for the proportion supporting the tax increase.

Ответ: дов. интервал (95%) от 0.3389635 до 0.3810365

Задание №2

The manager in the local shoe factory wants to estimate the productivity of the midnight shift. He draws a random sample of 10 nights and records the productivity as follows: 124 124 145 132 123 124 122 141 133 122. Estimate the average productivity. Assuming that the data follow a normal distribution, derive a 95 percent confidence interval.

Ответ: дов. интервал (95%) от 123.7979 до 134.2021

Задание №3

A sample of 20 students in a high school has a sample mean score of 520 on the English portion of the SAT. If the sample standard deviation is 65, test at the 0.1 level of significance, the hypothesis yhat the schools'mean SAT score is equal to 500 against the alternative hypothesis that the school's mean SAT score does not equal 500.

T: 1.376042
P-value: 0.1848127

Ответ: P-value превышает значение значимости (0.1), поэтому нулевую гипотезу (о том, что средняя SAT-оценка школы: 500)