Book: pride.txt

Number of lines = 13427 Number of characters = 704192 Number of vowels = 209731 Number of consonants = 341984 Number of letters = 551715 % vowels = 38.01%

Book: swann.txt

Number of lines = 16581 Number of characters = 1012445 Number of vowels = 363531 Number of consonants = 438475 Number of letters = 802006 % vowels = 45.33%

Actual:

Book Consonants Vowels pride.txt 341984 209731 swann.txt 438475 363531

Expected:

Book Consonants Vowels pride.txt 318079.53 233635.47 swann.txt 462379.47 339626.53

chi-square = 7160.61

The null hypothesis is that the text in the two books is drawn from the same population.

Chi-square is 7160.61 with df = 1. That is above the cutoff for p < .001, which is 10.828. Therefore the null hypothesis is rejected, and there is a significant difference in the percentage of vowels in the two texts.

The short way of writing this is: Chi-square = 7160.61, df=1, which is significant at p < .001

However you write it, that means that there is only 1 chance in 1000 that this result happened by chance, i.e., by accident.

A 5% level, i.e., that there is only 1 chance in 20 that the result appears to be real but really isn't, is sufficient for publication in this type of work. That's what I suggested for the homework, and that's fine.

For publication, if you have a .01 or .001 level of significance, you would usually use that.