

The times, in milliseconds, taken by a computer to perform a certain task were recorded on 10 randomly chosen occasions. The times were as follows.

6.44    6.16    5.62    5.82    6.51    6.62    6.19    6.42    6.34    6.28

It is claimed that the median time to complete the task is 6.4 milliseconds.

- (a) Carry out a Wilcoxon signed-rank test at the 5% significance level to test this claim. [6]
- (b) State an underlying assumption that is made when using a Wilcoxon signed-rank test. [1]