

## A DOUBLE SAMPLE TEST FOR THE SIGN AND SIGNED-RANK TEST

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This paper deals with the double sample test which includes a modification of the usual test of hypotheses. So far many papers have discussed the application of the double sample test to various parametric tests.

In this thesis the author has applied the double sample test to the sign test and the signed-rank test which are best known of non-parametric tests, using the existing relevant arguments.

In the first chapter we have explained the modification of the sign test procedure and found the power difference when the type I error of the usual test of hypotheses is the same as that of the double sample test. Also we have compared the two tests in each of the two cases on one-sample and two-sample problem.

In the second chapter we have explained the modification of the signed-rank test procedure and compared the power with the same method adopted in the first chapter.

Finally it is shown that the double sample test for the sign test and signed-rank test is more powerful than the usual sample test of hypotheses.

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