Sign Test Report

## STEP 1: CREATING THE HYPOTHESIS

Based on the information provided, the null and alternate hypothesis is given by:

vs

## STEP 2: SELECTION OF THE CRITICAL REGION

Based on the alpha value critical region is given by:

## STEP 3: CALCULATION OF THE TEST STATISTICS

The t-statistics is computed as follows :

## Sample Size (n): 12

## Hypothesized Median: 77

## Significance Level (α): 0.05

## Test Statistic (S): 0

## Critical Value (S\_critical): 3

## P-value: 0.0004882812

## STEP 4: CONCLUSION BASED ON P VALUE

## Conclusion: Reject the null hypothesis: The sample median is significantly different from the hypothesized median at a 5% significance level.