

A computer used by a 24-hour banking service is supposed to randomly assign each transaction to one of 5 memory locations. A check at the end of a day's transactions gave the counts shown in the table to each of the 5 memory locations, along with the number of reported errors.

<u>Memory Location:</u>	1	2	3	4	5
Number of Transactions:	82	100	74	92	102
Number of Reported Errors	11	12	6	9	10

a. The bank manager wanted to test whether the proportion of errors in transactions assigned to each of the 5 memory locations differ. Do the test and write your conclusion using 1% level of significance by answering the following questions.

1. Null Hypothesis:  $H_0$  :  
Alternative Hypothesis:  $H_1$  :

2. Value of the Test Statistic:

3. Rejection region and Critical value.

4. Decision

5. Conclusion

b. What is Marascuilo procedure used for?

c. Is the Marascuilo procedure needed for this question? Reason?