

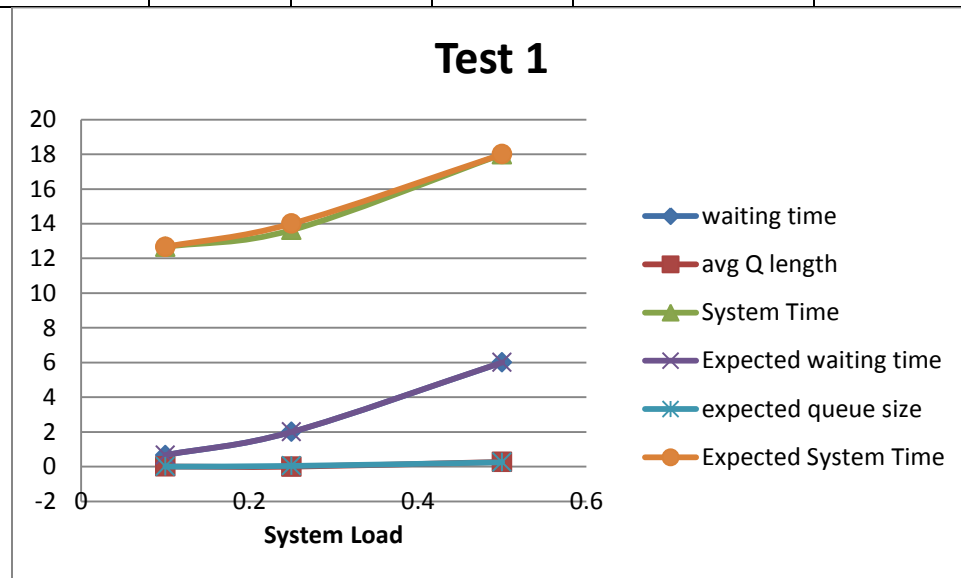
## Test Analysis MP4

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There was a bug in my dropped packets size showing as 0 but during debugging I was able to see that there were packets being dropped every now and then. It seemed that the more packets that were dropped the faster the speed was since it's one less customer to deal with which balances out the whole of the process in all. It seems as though the equations don't really take into account the fact that a packet may be dropped once or twice over time.

Test 1:

system load	waiting time	avg Q length	System Time	Expected waiting time	expected queue size	expected System Size
0.1	0.6667	0.00611	12.667	0.667	0.0055	12.6671
0.25	2	0		2.00142	0.0416963	14.0014
0.5	6	0.275	18	6.00427	0.250718	18.0043
1	60	5500	60			
1.2	494	54.34	506			
2.4	1025	122.68	975			



Test 2:

system load	waiting time	avg Q length	System Time	Expected waiting time	expected queue size	expected System Size
0.1	0.6388	0.006111	12.667	0.740741	0.00617284	12.7407
0.25	2.18	0.04583	14	2.222	0.04629	14.222
0.5	6.354	0.275	18	6.6667	0.27778	18.666667
1	144	13.2	156			
1.2	188.857	15.054	169.857			

2.4	993.998	218.68	1006			
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Test 3:

system load	waiting time	avg Q length	System Time	Expected waiting time	expected queue size	expected System Size
0.1	0.68668	0.006131	12.686	0.66714	0.00555951	12.6671
0.25	2.06	0.0458334	14.42	2.00142	0.0416963	14.0014
0.5	6.18	0.275	18.54	6.6667	0.250178	18.0043
1	294	26.95	306			
1.2	327.333	36.0066	339.333			
2.4	993.998	218.68	1006			

Test 4:

Didn't work...

TEST 5;

system load	waiting time	avg Q length	System Time	Expected waiting time	expected queue size	expected System Time
0.1	0.68785	0.0061111	13.0467	0.667141	0.00555951	12.6671
0.25	2.15	0.045865	14.21	2.00142	0.0416963	14.0014
0.5	6.23	0.296	18.45	6.6667	0.250178	18.0043
1	296.94	27.2195	309.06			
1.2	330.60633	36.366666	342.72633			
2.4	1003.93798	220.8668	1016.06			

## Test 5

