

# Sheet1

Lab#2

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## Part 1

Trial	LNbata2Sum	Bata2mean	MLE	MOM
1	-54.47	0.61	1.82	1.67
2	-57.26	0.63	1.71	1.8
3	-50.14	0.67	1.86	1.94
4	-56	0.63	1.71	1.81
5	-48.05	0.67	1.97	2.04
6	-40.25	0.69	2.24	2.18
7	-52.11	0.63	1.89	1.65
8	-42.17	0.67	2.16	2.06
9	-54.11	0.62	1.82	1.79
10	-51.1	0.63	1.91	1.89

MSE

0.51

0.42

The MOM method is better and has the lower MSE value.

## Part 2

Trial	Uniform Mean	Z-score	Bata2mean	Z-score
1	0.42	-1.75	0.61	4.26
2	0.44	-0.55	0.62	4.95
3	0.47	-0.14	0.64	5.61
4	0.47	-0.31	0.63	5.11
5	0.52	1.3	0.68	6.6
6	0.52	1.41	0.69	7.05
7	0.46	-0.91	0.63	5.1
8	0.51	0.72	0.67	6.67
9	0.42	-1.14	0.63	4.95
10	0.48	-0.13	0.64	5.39

All but 2 of the uniform mean Z-scores pass the test, while all the other values fail the test.

Trial	UniformLNSum Test	LNbata2Sum Test
1	-109.64	-0.95
2	-115.08	-1.51
3	-101.19	-0.11
4	-112.3	-1.23
5	-96.1	0.36
6	-81.5	1.81
7	-104.7	-0.47
8	-84.2	1.51
9	-108.24	-0.83
10	-103.7	-0.37

## Sheet1

Also here all, but two of the uniform test values pass the test while all the other values failed the test.