

Mean of Exponent Distribution of 1000 Random Numbers with lambda=7

The UNIVARIATE Procedure
Variable: iteration

Moments			
N	10000	Sum Weights	10000
Mean	500.5	Sum Observations	5005000
Std Deviation	288.689425	Variance	83341.5842
Skewness	0	Kurtosis	-1.2000024
Uncorrected SS	3338335000	Corrected SS	833332500
Coeff Variation	57.6802048	Std Error Mean	2.88689425

Basic Statistical Measures			
Location		Variability	
Mean	500.5000	Std Deviation	288.68943
Median	500.5000	Variance	83342
Mode	1.0000	Range	999.00000
		Interquartile Range	500.00000

Note: The mode displayed is the smallest of 1000 modes with a count of 10.

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	173.3697	Pr > t 	<.0001
Sign	M	5000	Pr >= M 	<.0001
Signed Rank	S	25002500	Pr >= S 	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	1000.0
99%	990.5
95%	950.5
90%	900.5
75% Q3	750.5
50% Median	500.5
25% Q1	250.5

10%	100.5
5%	50.5
1%	10.5
0% Min	1.0

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
1	10	1000	9996
1	9	1000	9997
1	8	1000	9998
1	7	1000	9999
1	6	1000	10000

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The UNIVARIATE Procedure
Variable: group

Moments			
N	10000	Sum Weights	10000
Mean	5.5	Sum Observations	55000
Std Deviation	2.87242495	Variance	8.25082508
Skewness	0	Kurtosis	-1.2242545
Uncorrected SS	385000	Corrected SS	82500
Coeff Variation	52.2259081	Std Error Mean	0.02872425

Basic Statistical Measures			
Location		Variability	
Mean	5.500000	Std Deviation	2.87242
Median	5.500000	Variance	8.25083
Mode	1.000000	Range	9.00000
		Interquartile Range	5.00000

Note: The mode displayed is the smallest of 10 modes with a count of 1000.

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	191.4758	Pr > t 	<.0001
Sign	M	5000	Pr >= M 	<.0001
Signed Rank	S	25002500	Pr >= S 	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	10.0
99%	10.0
95%	10.0
90%	9.5
75% Q3	8.0
50% Median	5.5
25% Q1	3.0

10%	1.5
5%	1.0
1%	1.0
0% Min	1.0

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
1	9991	10	9960
1	9981	10	9970
1	9971	10	9980
1	9961	10	9990
1	9951	10	10000

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The UNIVARIATE Procedure
Variable: x

Moments			
N	10000	Sum Weights	10000
Mean	1.000536	Sum Observations	10005.36
Std Deviation	0.98502582	Variance	0.97027586
Skewness	2.01699528	Kurtosis	6.23967974
Uncorrected SS	19712.5113	Corrected SS	9701.78837
Coeff Variation	98.4498127	Std Error Mean	0.00985026

Basic Statistical Measures			
Location		Variability	
Mean	1.000536	Std Deviation	0.98503
Median	0.709285	Variance	0.97028
Mode	.	Range	8.89898
		Interquartile Range	1.09075

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	101.5746	Pr > t 	<.0001
Sign	M	5000	Pr >= M 	<.0001
Signed Rank	S	25002500	Pr >= S 	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	8.89903E+00
99%	4.44687E+00
95%	2.93626E+00
90%	2.25441E+00
75% Q3	1.39028E+00
50% Median	7.09285E-01
25% Q1	2.99530E-01
10%	1.12099E-01
5%	5.35892E-02

1%	1.10149E-02
0% Min	5.69413E-05

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
5.69413E-05	5630	7.70104	9232
8.91278E-05	5078	7.88601	1838
1.66658E-04	6631	8.35676	6845
3.28509E-04	4849	8.51295	5685
4.38239E-04	1664	8.89903	2012

Mean of Exponent Distribution of 1000 Random Numbers with lambda=7

The UNIVARIATE Procedure
Variable: lam7

Moments			
N	10000	Sum Weights	10000
Mean	0.14293371	Sum Observations	1429.33714
Std Deviation	0.14071797	Variance	0.01980155
Skewness	2.01699528	Kurtosis	6.23967974
Uncorrected SS	402.296148	Corrected SS	197.995681
Coeff Variation	98.4498127	Std Error Mean	0.00140718

Basic Statistical Measures			
Location		Variability	
Mean	0.142934	Std Deviation	0.14072
Median	0.101326	Variance	0.01980
Mode	.	Range	1.27128
		Interquartile Range	0.15582

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	101.5746	Pr > t 	<.0001
Sign	M	5000	Pr >= M 	<.0001
Signed Rank	S	25002500	Pr >= S 	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	1.2713E+00
99%	6.3527E-01
95%	4.1947E-01
90%	3.2206E-01
75% Q3	1.9861E-01
50% Median	1.0133E-01
25% Q1	4.2790E-02
10%	1.6014E-02
5%	7.6556E-03

1%	1.5736E-03
0% Min	8.1345E-06

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
8.13447E-06	5630	1.10015	9232
1.27325E-05	5078	1.12657	1838
2.38083E-05	6631	1.19382	6845
4.69298E-05	4849	1.21614	5685
6.26055E-05	1664	1.27129	2012

Mean of Exponent Distribution of 1000 Random Numbers with lambda=7

The UNIVARIATE Procedure
Variable: mean

Moments			
N	10000	Sum Weights	10000
Mean	0.14293371	Sum Observations	1429.33714
Std Deviation	0.04509438	Variance	0.0020335
Skewness	0.74125157	Kurtosis	1.20169354
Uncorrected SS	224.633465	Corrected SS	20.3329973
Coeff Variation	31.5491554	Std Error Mean	0.00045094

Basic Statistical Measures			
Location		Variability	
Mean	0.142934	Std Deviation	0.04509
Median	0.138682	Variance	0.00203
Mode	0.042184	Range	0.30963
		Interquartile Range	0.05739

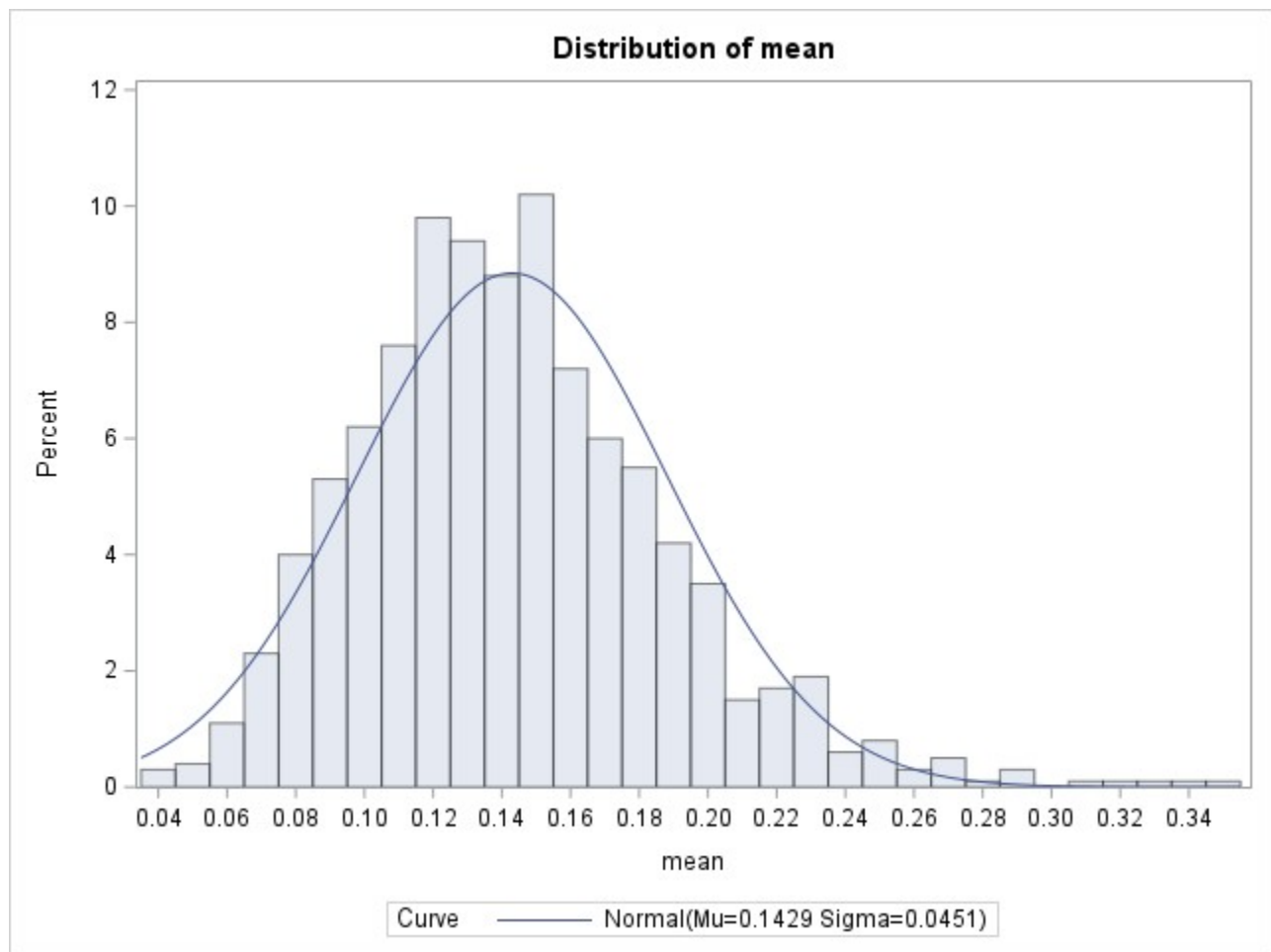
Note: The mode displayed is the smallest of 1000 modes with a count of 10.

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	316.9657	Pr > t 	<.0001
Sign	M	5000	Pr >= M 	<.0001
Signed Rank	S	25002500	Pr >= S 	<.0001

Quantiles (Definition 5)	
Level	Quantile
100% Max	3.518E-01
99%	2.701E-01
95%	2.240E-01
90%	2.014E-01
75% Q3	1.692E-01
50% Median	1.387E-01
25% Q1	1.118E-01

10%	8.986E-02
5%	7.797E-02
1%	5.790E-02
0% Min	4.218E-02

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
4.218E-02	1450	0.351818	716
4.218E-02	1449	0.351818	717
4.218E-02	1448	0.351818	718
4.218E-02	1447	0.351818	719
4.218E-02	1446	0.351818	720

Mean of Exponent Distribution of 1000 Random Numbers with lambda=7**The UNIVARIATE Procedure**

Mean of Exponent Distribution of 1000 Random Numbers with lambda=7

The UNIVARIATE Procedure Fitted Normal Distribution for mean

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	0.142934
Std Dev	Sigma	0.045094

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.0506138	Pr > D	<0.010
Cramer-von Mises	W-Sq	7.1691411	Pr > W-Sq	<0.005
Anderson-Darling	A-Sq	46.0278885	Pr > A-Sq	<0.005

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	0.05790	0.03803
5.0	0.07797	0.06876
10.0	0.08986	0.08514
25.0	0.11178	0.11252
50.0	0.13868	0.14293
75.0	0.16918	0.17335
90.0	0.20143	0.20072
95.0	0.22398	0.21711
99.0	0.27009	0.24784