10/17/23, 10:56 PM Results: Project7.sas

The UNIVARIATE Procedure Variable: f1

Moments					
N	86				
Mean	6.59302326	Sum Observations	567		
Std Deviation	1.70382205	Variance	2.90300958		
Skewness	-0.4040693	Kurtosis	-0.3833494		
Uncorrected SS	3985	Corrected SS	246.755814		
Coeff Variation	25.8428036	Std Error Mean	0.18372786		

Basic Statistical Measures				
Location Variability				
Mean 6.593023 Std Deviation 1.7038				
Median	6.500000	Variance	2.90301	
Mode	6.000000	Range	7.00000	
		Interquartile Range	2.00000	

Tests for Location: Mu0=0					
Test	Statistic p Value				
Student's t	t 35.88472		Pr > t	<.0001	
Sign	М	43	Pr >= M	<.0001	
Signed Rank	s	1870.5	Pr >= S	<.0001	

Quantiles (Definition 5)		
Level	Quantile	
100% Max	9.0	
99%	9.0	
95%	9.0	
90%	9.0	
75% Q3	8.0	
50% Median	6.5	
25% Q1	6.0	
10%	4.0	
5%	4.0	
1%	2.0	
0% Min	2.0	

Extreme Observations				
Lowest		Highest		
Value	Value Obs		Obs	
2	83	9	16	
3	72	9	25	
3	68	9	29	
3	28	9	31	
4	87	9	35	

Missing Values				
Missing		Percent Of		
Value	Count	All Obs	Missing Obs	
	1	1.15	100.00	

10/17/23, 10:56 PM Results: Project7.sas

The UNIVARIATE Procedure Variable: f2

Moments					
N	N 87 Sum Weights				
Mean	6.55172414	Sum Observations	570		
Std Deviation	1.65486331	Variance	2.73857257		
Skewness	-0.6524158	Kurtosis	0.50343961		
Uncorrected SS	3970	Corrected SS	235.517241		
Coeff Variation	25.25844	Std Error Mean	0.17741997		

Basic Statistical Measures				
Location Variability				
Mean 6.551724 Std Deviation 1.6548				
Median	7.000000	Variance	2.73857	
Mode	7.000000	Range	8.00000	
		Interquartile Range	2.00000	

Tests for Location: Mu0=0					
Test Statistic p Value					
Student's t	t 36.92777		Pr > t	<.0001	
Sign	М	43.5	Pr >= M	<.0001	
Signed Rank	S	1914	Pr >= S	<.0001	

Quantiles (Definition 5)	
Level	Quantile
100% Max	9
99%	9
95%	9
90%	9
75% Q3	8
50% Median	7
25% Q1	6
10%	4
5%	4
1%	1
0% Min	1

Extreme Observations					
Low	est	High	est		
Value	Obs	Value	Obs		
1	83	9	13		
3	68	9	14		
3	64	9	16		
3	28	9	25		
4	86	9	35		

The UNIVARIATE Procedure Variable: f3

Moments							
N 86 Sum Weights 86							
Mean	Mean 6.30232558 Sum Observations 542						

Moments					
Std Deviation	1.71546439	Variance	2.94281806		
Skewness	-0.2701982	Kurtosis	-0.6872869		
Uncorrected SS	3666	Corrected SS	250.139535		
Coeff Variation	27.2195456	Std Error Mean	0.18498328		

	Basic Statistical Measures				
Loc	Location Variability				
Mean	6.302326	Std Deviation	1.71546		
Median	6.000000	Variance	2.94282		
Mode	6.000000	Range	6.00000		
		Interquartile Range	3.00000		

Tests for Location: Mu0=0				
Test	Statistic p Value			
Student's t	t	34.0697	Pr > t	<.0001
Sign	М	43	Pr >= M	<.0001
Signed Rank	S	1870.5	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	9	
99%	9	
95%	9	
90%	9	
75% Q3	8	
50% Median	6	
25% Q1	5	
10%	4	
5%	3	
1%	3	
0% Min	3	

Extreme Observations					
Low	Lowest		est		
Value	Obs	Value	Obs		
3	84	9	13		
3	83	9	14		
3	72	9	16		
3	70	9	25		
3	68	9	35		

Missing Values				
Missing		Percent Of		
Value	Count	All Obs	Missing Obs	
	1	1.15	100.00	

The UNIVARIATE Procedure Variable: f4

Moments				
N	87	Sum Weights	87	

Moments						
Mean	5.63218391	Sum Observations	490			
Std Deviation	2.01802887	Variance	4.07244052			
Skewness	-0.0973318	Kurtosis	-0.7339927			
Uncorrected SS	3110	Corrected SS	350.229885			
Coeff Variation	35.8303085	Std Error Mean	0.2163554			

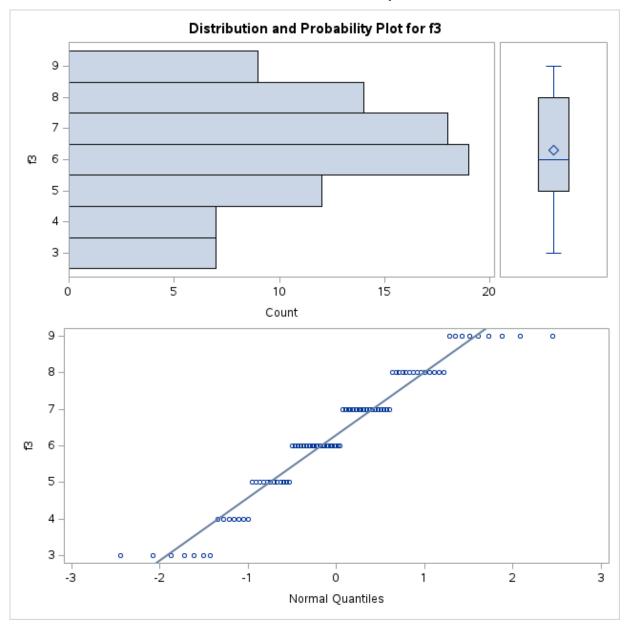
	Basic Statistical Measures				
Loc	Location Variability				
Mean	5.632184	Std Deviation	2.01803		
Median	6.000000	Variance	4.07244		
Mode	6.000000	Range	7.00000		
		Interquartile Range	3.00000		

Tests for Location: Mu0=0				
Test	Statistic p Value			
Student's t	t	26.03209	Pr > t	<.0001
Sign	М	43.5	Pr >= M	<.0001
Signed Rank	S	1914	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	9	
99%	9	
95%	9	
90%	8	
75% Q3	7	
50% Median	6	
25% Q1	4	
10%	3	
5%	2	
1%	2	
0% Min	2	

Extreme Observations					
Low	Lowest		est		
Value	Obs	Value	Obs		
2	87	9	12		
2	84	9	14		
2	83	9	16		
2	72	9	25		
2	70	9	35		

The UNIVARIATE Procedure



The UNIVARIATE Procedure Variable: difference

Moments					
N	87 Sum Weights				
Mean	-0.9195402	Sum Observations	-80		
Std Deviation	1.0913869	Variance	1.19112537		
Skewness	-0.3824239	Kurtosis	-0.2210449		
Uncorrected SS	176	Corrected SS	102.436782		
Coeff Variation	-118.68833	Std Error Mean	0.11700896		

Basic Statistical Measures				
Location Variability				
Mean	-0.91954	Std Deviation 1.0913		
Median	-1.00000	Variance	1.19113	
Mode	-1.00000 Range		5.00000	
Interquartile Range 2.00000				

10/17/23, 10:56 PM Results: Project7.sas

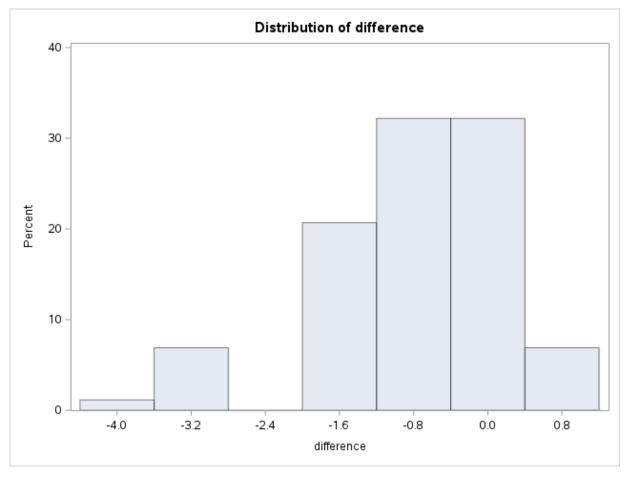
Note: The mode displayed is the smallest of 2 modes with a count of 28.

Tests for Location: Mu0=0					
Test	Statistic p Value				
Student's t	t -7.85872		Pr > t	<.0001	
Sign	М	-23.5	Pr >= M	<.0001	
Signed Rank	S	S -780 Pr >= S <.0001			

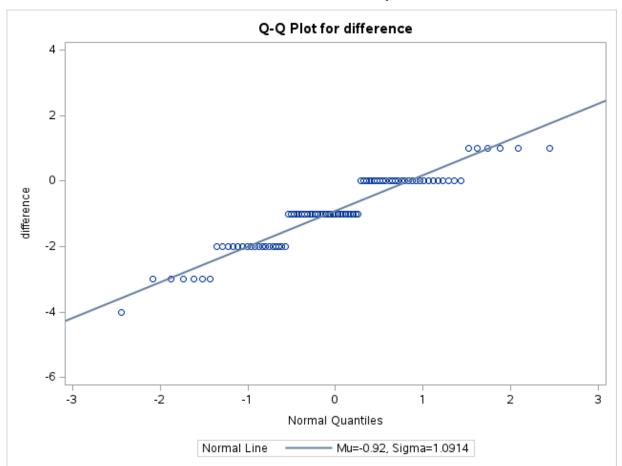
Quantiles (Definition 5)		
Level	Quantile	
100% Max	1	
99%	1	
95%	1	
90%	0	
75% Q3	0	
50% Median	-1	
25% Q1	-2	
10%	-2	
5%	-3	
1%	-4	
0% Min	-4	

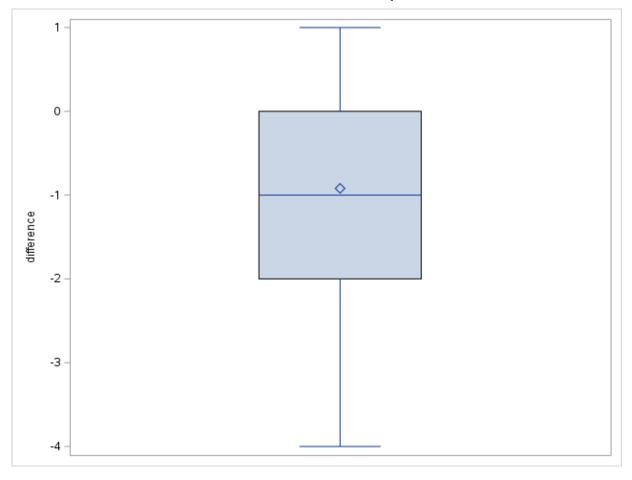
Extreme Observations				
Lowest		Highest		
Value	Value Obs		Obs	
-4	87	1	33	
-3	70	1	43	
-3	66	1	45	
-3	63	1	62	
-3	56	1	83	

The UNIVARIATE Procedure



The UNIVARIATE Procedure





The UNIVARIATE Procedure Variable: difference

Gender=Female

Moments						
N	N 43 Sum Weights					
Mean	-0.9069767	Sum Observations	-39			
Std Deviation	1.17136375	Variance	1.37209302			
Skewness	-0.5611377	Kurtosis	-0.1272379			
Uncorrected SS	93	Corrected SS	57.627907			
Coeff Variation	-129.15036	Std Error Mean	0.1786313			

Basic Statistical Measures				
Location Variability				
Mean	-0.90698	Std Deviation 1.1713		
Median	-1.00000	Variance	1.37209	
Mode 0.00000 Range		Range	5.00000	
Interquartile Range 2.000				

Tests for Location: Mu0=0					
Test	Statistic p Value				
Student's t	t -5.07737		Pr > t	<.0001	
Sign	М	-10.5	Pr >= M	<.0001	
Signed Rank	S	-166.5	Pr >= S	<.0001	

Quantiles (Definition 5)		
Level	Quantile	

Quantiles (Definition 5)		
Level Quantile		
100% Max	1	
99%	1	
95%	1	
90%	0	
75% Q3	0	
50% Median	-1	
25% Q1	-2	
10%	-2	
5%	-3	
1%	-4	
0% Min	-4	

Extreme Observations					
Lowest Highest					
Value	Obs	Value	Obs		
-4	43	0	29		
-3	32	0	33		
-3	26	1	11		
-3	9	1	20		
-2	42	1	31		

The UNIVARIATE Procedure Variable: difference

Gender=Male

Moments					
N	44				
Mean	-0.9318182	Sum Observations	-41		
Std Deviation	1.02066388	Variance	1.04175476		
Skewness	-0.1415272	Kurtosis	-0.3277313		
Uncorrected SS	83	Corrected SS	44.7954545		
Coeff Variation	-109.53466	Std Error Mean	0.15387087		

Basic Statistical Measures								
Location Variability								
Mean	-0.93182	Std Deviation	1.02066					
Median	-1.00000	Variance	1.04175					
Mode	-1.00000	Range	4.00000					
		Interquartile Range	2.00000					

Tests for Location: Mu0=0									
Test	t Statistic p Value								
Student's t	t	-6.05585	Pr > t	<.0001					
Sign	М	-13	Pr >= M	<.0001					
Signed Rank	S	-232.5	Pr >= S	<.0001					

Quantiles (Definition 5)					
Level	Quantile				
100% Max	1				
99%	1				

	e =\
Quantiles (De	finition 5)
Level	Quantile
95%	1
90%	0
75% Q3	0
50% Median	-1
25% Q1	-2
10%	-2
5%	-3
1%	-3
0% Min	-3

Extreme Observations										
Low	est	Highest								
Value	Obs	Value	Obs							
-3	79	0	78							
-3	77	0	80							
-3	52	1	59							
-2	86	1	68							
-2	81	1	85							

The UNIVARIATE Procedure Variable: difference

Moments										
N	87	87 Sum Weights								
Mean	-0.9195402	Sum Observations	-80							
Std Deviation	1.0913869	Variance	1.19112537							
Skewness	-0.3824239	Kurtosis	-0.2210449							
Uncorrected SS	176	Corrected SS	102.436782							
Coeff Variation	-118.68833	Std Error Mean	0.11700896							

Basic Statistical Measures								
Location Variability								
Mean	-0.91954	Std Deviation	1.09139					
Median	-1.00000	Variance	1.19113					
Mode	-1.00000	Range	5.00000					
		Interquartile Range	2.00000					

Note: The mode displayed is the smallest of 2 modes with a count of 28.

Tests for Location: Mu0=0										
Test Statistic p Value										
Student's t	t	-7.85872	Pr > t	<.0001						
Sign	М	-23.5	Pr >= M	<.0001						
Signed Rank	s	-780	Pr >= S	<.0001						

Quantiles (D	efinition 5)
Level	Quantile
100% Max	1
99%	1
95%	1

10/17/23, 10:56 PM

finition 5)
Quantile
0
0
-1
-2
-2
-3
-4
-4

Extreme Observations										
Low	est	Highest								
Value	Obs	Value	Obs							
-4	43	1	20							
-3	79	1	31							
-3	77	1	59							
-3	52	1	68							
-3	32	1	85							

Obs	P_5	P_10	P_15	P_20	P_25	P_30	P_35	P_40	P_45	P_50	P_55	P_60	P_65	P_70	P_75	P_80	P_85	P_90	P_95	P_100
1	-3	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	1	1

The TTEST Procedure

Variable: score

Section	Method	N	Mean	Std Dev	Std Err	Minimum	Maximum
Α		5	71.2000	5.2631	2.3537	65.0000	78.0000
В		5	65.0000	11.4237	5.1088	50.0000	80.0000
Diff (1-2)	Pooled		6.2000	8.8938	5.6249		
Diff (1-2)	Satterthwaite		6.2000		5.6249		

Section	Method	Mean	ean 95% CL Mean		Std Dev	95% CL	Std Dev
Α		71.2000	64.6650	77.7350	5.2631	3.1533	15.1238
В		65.0000	50.8157	79.1843	11.4237	6.8443	32.8265
Diff (1-2)	Pooled	6.2000	-6.7711	19.1711	8.8938	6.0074	17.0385
Diff (1-2)	Satterthwaite	6.2000	-7.7893	20.1893			

Method	Variances	DF	t Value	Pr > t
Pooled	Equal	8	1.10	0.3024
Satterthwaite	Unequal	5.6249	1.10	0.3153

Equality of Variances						
Method Num DF Den DF F Value Pr >						
Folded F	4	4	4.71	0.1625		

The TTEST Procedure

Variable: Pressure

Test	Method	N	Mean	Std Dev	Std Err	Minimum	Maximum
a		6	156.1	16.6426	6.7943	130.2	180.7
b		6	166.3	21.9951	8.9794	136.9	201.4
Diff (1-2)	Pooled		-10.2000	19.5033	11.2602		
Diff (1-2)	Satterthwaite		-10.2000		11.2602		

Test	Method	Mean	95% CL Mean		Std Dev	95% CL	Std Dev
а		156.1	138.6	173.5	16.6426	10.3884	40.8178
b		166.3	143.2	189.3	21.9951	13.7295	53.9454
Diff (1-2)	Pooled	-10.2000	-35.2894	14.8894	19.5033	13.6273	34.2270
Diff (1-2)	Satterthwaite	-10.2000	-35.5430	15.1430			

Method	Variances	DF	t Value	Pr > t
Pooled	Equal	10	-0.91	0.3863
Satterthwaite	Unequal	9.3119	-0.91	0.3879

Equality of Variances						
Method	Num DF	Den DF	F Value	Pr > F		
Folded F	5	5	1.75	0.5554		

The FREQ Procedure

Frequency Expected

Table of Show by Gender					
	Gender				
Show	Boys	Girls	Total		
Lone_Ran	50 33.333	50 66.667	100		
Sesame_S	30 36.667	80 73.333	110		
Simpsons	20 30	70 60	90		
Total	100	200	300		

Statistics for Table of Show by Gender

Statistic	DF	Value	Prob
Chi-Square	2	19.3182	<.0001
Likelihood Ratio Chi-Square	2	19.0224	<.0001
Mantel-Haenszel Chi-Square	1	16.8155	<.0001
Phi Coefficient		0.2538	
Contingency Coefficient		0.2460	
Cramer's V		0.2538	

Sample Size = 300