

**The UNIVARIATE Procedure****Variable: Runtime**

Moments			
N	31	Sum Weights	31
Mean	10.586129	Sum Observations	328.17
Std Deviation	1.38741409	Variance	1.92491785
Skewness	0.51465208	Kurtosis	0.13604218
Uncorrected SS	3531.7975	Corrected SS	57.7475355
Coeff Variation	13.1059624	Std Error Mean	0.24918693

Basic Statistical Measures			
Location		Variability	
Mean	10.58613	Std Deviation	1.38741
Median	10.47000	Variance	1.92492
Mode	.	Range	5.86000
		Interquartile Range	1.74000

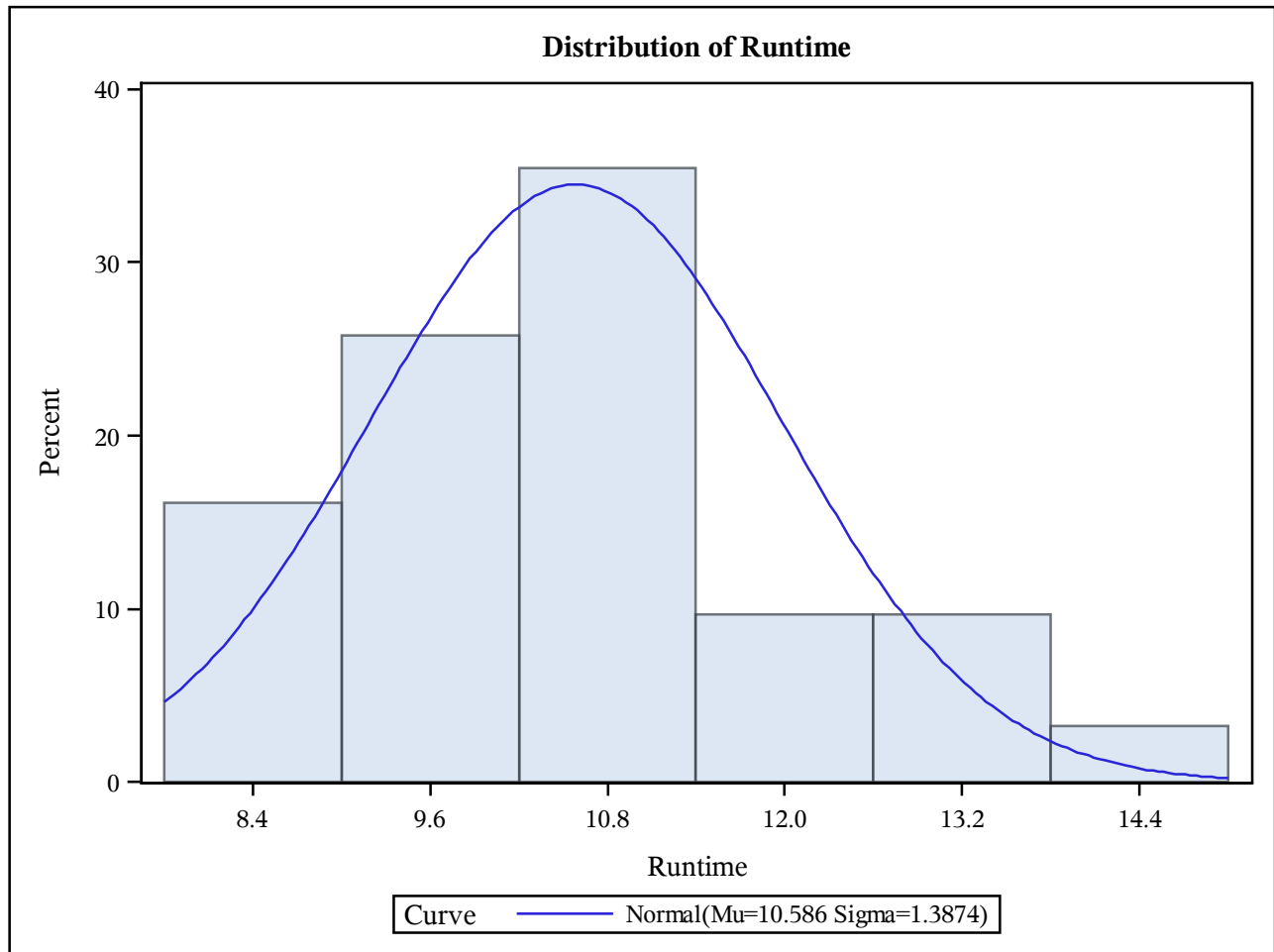
Tests for Location: $\mu_0=0$				
Test	Statistic		p Value	
Student's t	t	42.48268	Pr >  t	<.0001
Sign	M	15.5	Pr >=  M	<.0001
Signed Rank	S	248	Pr >=  S	<.0001

Quantiles (Definition 5)	
Quantile	Estimate
100% Max	14.03
99%	14.03
95%	13.08
90%	12.63
75% Q3	11.37
50% Median	10.47
25% Q1	9.63
10%	8.92
5%	8.63

***The UNIVARIATE Procedure***  
***Variable: Runtime***

Quantiles (Definition 5)	
Quantile	Estimate
1%	8.17
0% Min	8.17

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
8.17	1	11.95	27
8.63	2	12.63	28
8.65	3	12.88	29
8.92	4	13.08	30
8.95	5	14.03	31

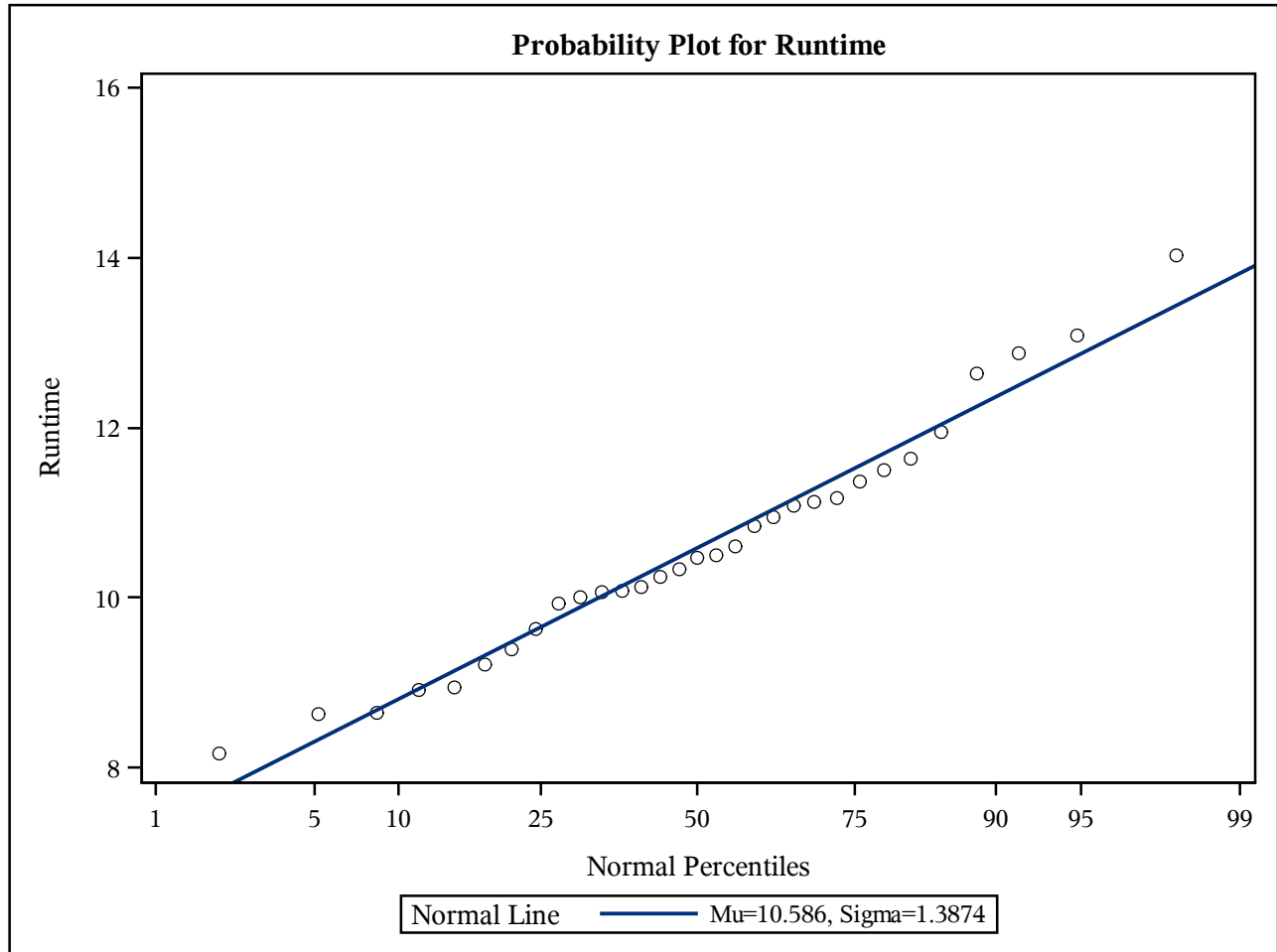
**The UNIVARIATE Procedure**

**The UNIVARIATE Procedure**  
**Fitted Normal Distribution for Runtime**

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	10.58613
Std Dev	Sigma	1.387414

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.07887365	Pr > D	>0.150
Cramer-von Mises	W-Sq	0.03748843	Pr > W-Sq	>0.250
Anderson-Darling	A-Sq	0.26425028	Pr > A-Sq	>0.250

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	8.17000	7.35852
5.0	8.63000	8.30404
10.0	8.92000	8.80809
25.0	9.63000	9.65033
50.0	10.47000	10.58613
75.0	11.37000	11.52193
90.0	12.63000	12.36417
95.0	13.08000	12.86822
99.0	14.03000	13.81374

**The UNIVARIATE Procedure**

**The UNIVARIATE Procedure****Variable: Age**

Moments			
N	31	Sum Weights	31
Mean	47.6774194	Sum Observations	1478
Std Deviation	5.26236383	Variance	27.6924731
Skewness	-0.1327661	Kurtosis	-0.7501887
Uncorrected SS	71298	Corrected SS	830.774194
Coeff Variation	11.0374343	Std Error Mean	0.94514845

Basic Statistical Measures			
Location		Variability	
Mean	47.67742	Std Deviation	5.26236
Median	48.00000	Variance	27.69247
Mode	44.00000	Range	19.00000
		Interquartile Range	8.00000

**Note:** The mode displayed is the smallest of 5 modes with a count of 3.

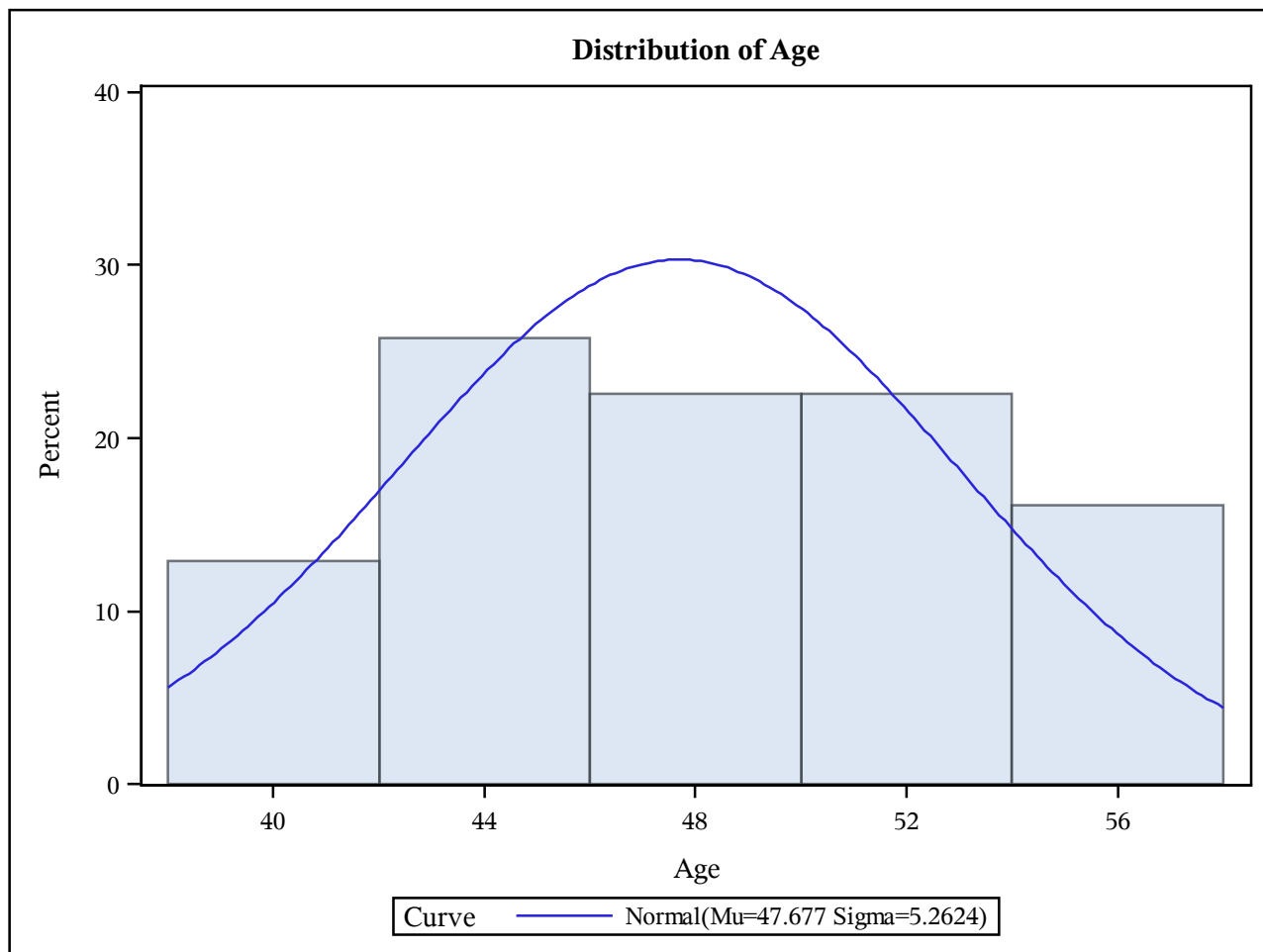
Tests for Location: $\mu_0=0$				
Test	Statistic		p Value	
Student's t	t	50.44437	Pr >  t	<.0001
Sign	M	15.5	Pr >=  M	<.0001
Signed Rank	S	248	Pr >=  S	<.0001

Quantiles (Definition 5)	
Quantile	Estimate
100% Max	57
99%	57
95%	57
90%	54
75% Q3	52
50% Median	48
25% Q1	44
10%	40
5%	38

**The UNIVARIATE Procedure**  
**Variable: Age**

Quantiles (Definition 5)	
Quantile	Estimate
1%	38
0% Min	38

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
38	6	54	15
38	2	54	23
40	27	54	29
40	11	57	9
42	1	57	28

**The UNIVARIATE Procedure**

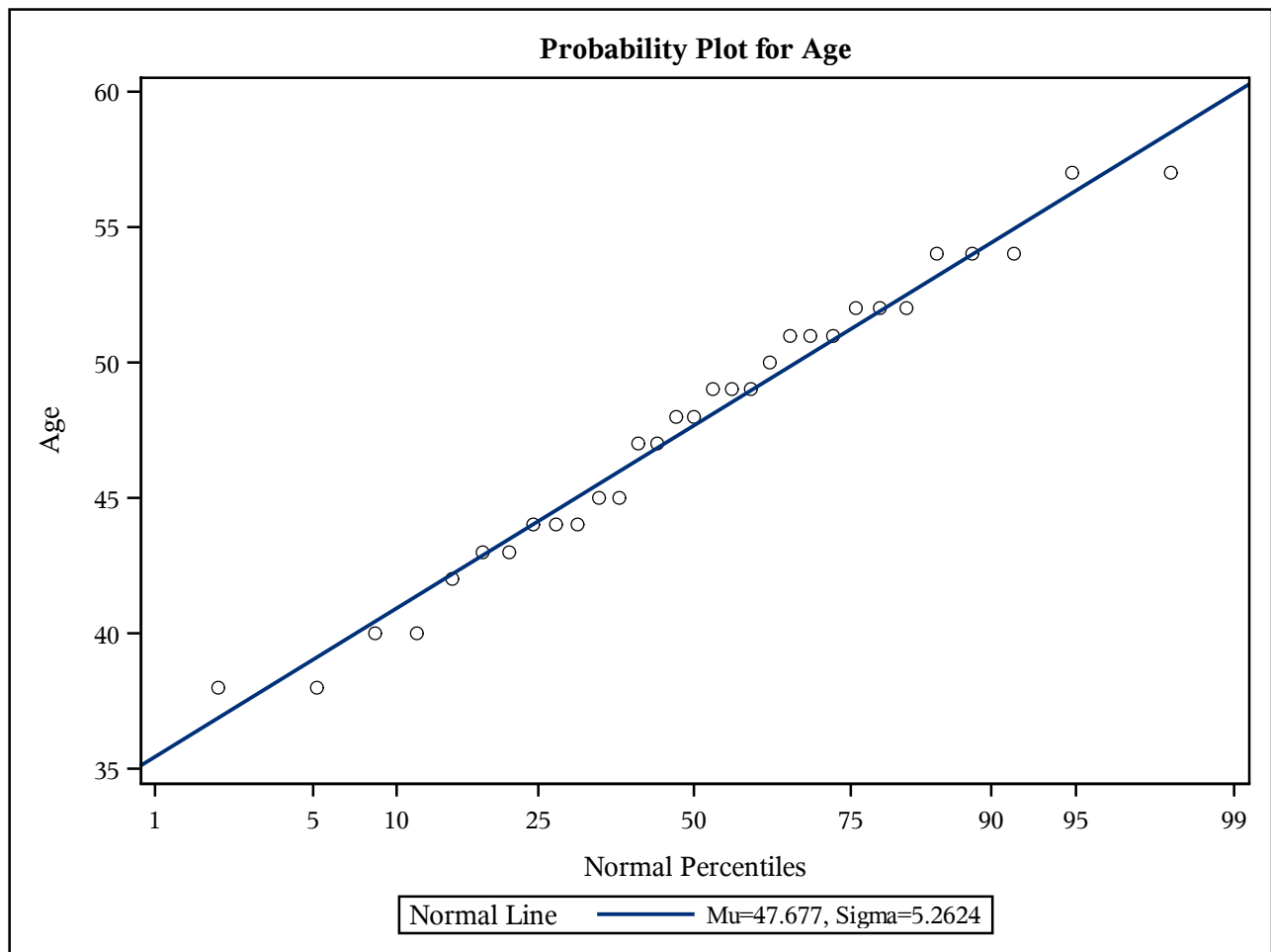


**The UNIVARIATE Procedure**  
**Fitted Normal Distribution for Age**

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	47.67742
Std Dev	Sigma	5.262364

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.09094449	Pr > D	>0.150
Cramer-von Mises	W-Sq	0.04188852	Pr > W-Sq	>0.250
Anderson-Darling	A-Sq	0.27166782	Pr > A-Sq	>0.250

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	38.0000	35.4353
5.0	38.0000	39.0216
10.0	40.0000	40.9334
25.0	44.0000	44.1280
50.0	48.0000	47.6774
75.0	52.0000	51.2268
90.0	54.0000	54.4214
95.0	57.0000	56.3332
99.0	57.0000	59.9195

***Univariate Statistics of sasuser.b\_fitness******The UNIVARIATE Procedure***

**Univariate Statistics of sasuser.b\_fitness****The UNIVARIATE Procedure**  
**Variable: Weight**

Moments			
N	31	Sum Weights	31
Mean	77.4445161	Sum Observations	2400.78
Std Deviation	8.32856764	Variance	69.3650389
Skewness	-0.2112754	Kurtosis	-0.2698478
Uncorrected SS	188008.197	Corrected SS	2080.95117
Coeff Variation	10.7542381	Std Error Mean	1.49585491

Basic Statistical Measures			
Location		Variability	
Mean	77.44452	Std Deviation	8.32857
Median	77.45000	Variance	69.36504
Mode	73.37000	Range	32.55000
		Interquartile Range	9.75000

**Note:** The mode displayed is the smallest of 4 modes with a count of 2.

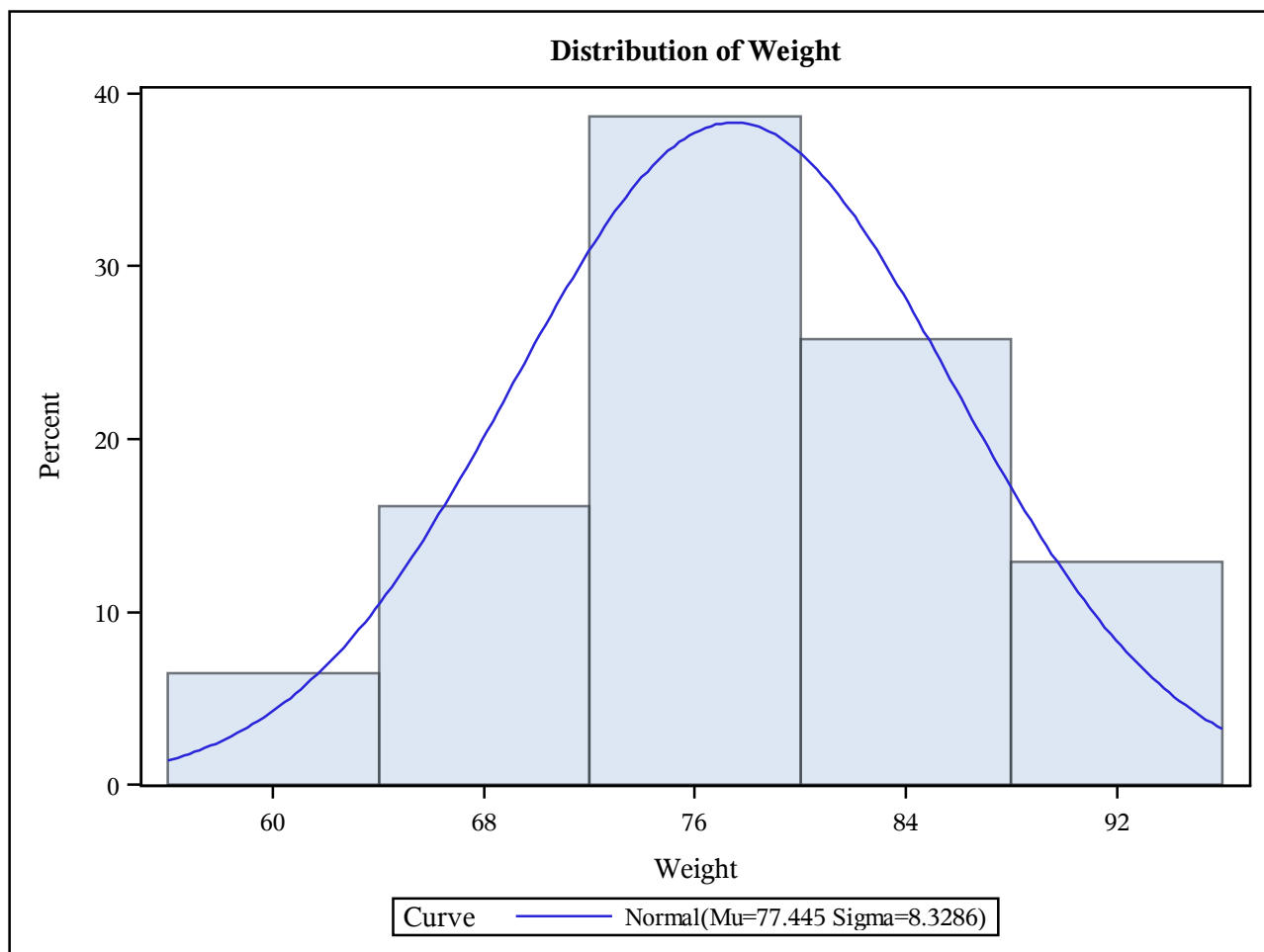
Tests for Location: $\mu_0=0$				
Test	Statistic		p Value	
Student's t	t	51.77275	Pr >  t	<.0001
Sign	M	15.5	Pr >=  M	<.0001
Signed Rank	S	248	Pr >=  S	<.0001

Quantiles (Definition 5)	
Quantile	Estimate
100% Max	91.63
99%	91.63
95%	91.63
90%	89.02
75% Q3	82.78
50% Median	77.45
25% Q1	73.03
10%	67.25
5%	61.24

***Univariate Statistics of sasuser.b\_fitness******The UNIVARIATE Procedure***  
***Variable: Weight***

Quantiles (Definition 5)	
Quantile	Estimate
1%	59.08
0% Min	59.08

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
59.08	9	87.66	31
61.24	25	89.02	6
66.45	22	89.47	24
67.25	21	91.63	14
68.15	1	91.63	29

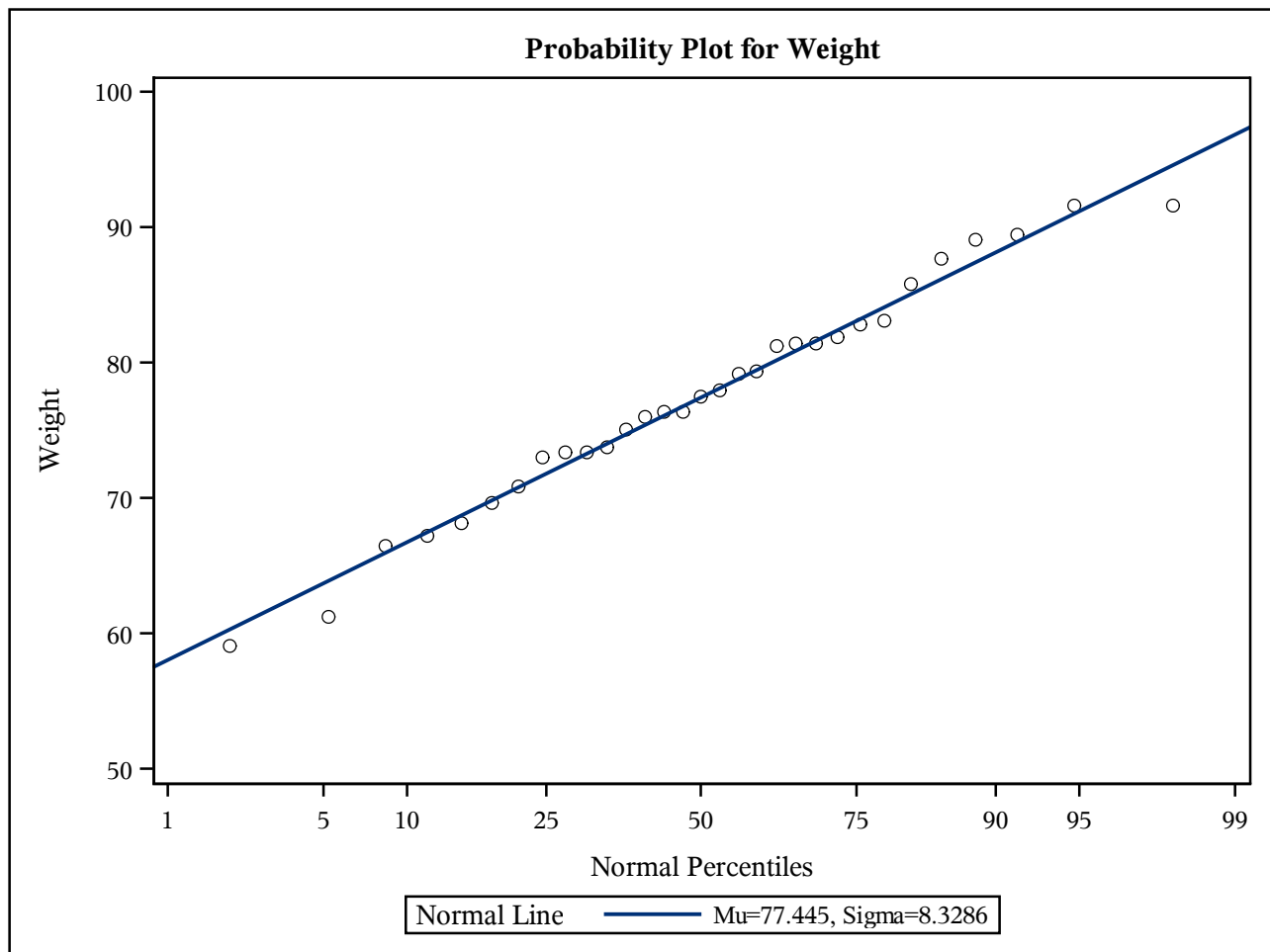
**Univariate Statistics of sasuser.b\_fitness*****The UNIVARIATE Procedure***

**Univariate Statistics of sasuser.b\_fitness****The UNIVARIATE Procedure  
Fitted Normal Distribution for Weight**

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	77.44452
Std Dev	Sigma	8.328568

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.07223389	Pr > D	>0.150
Cramer-von Mises	W-Sq	0.01872379	Pr > W-Sq	>0.250
Anderson-Darling	A-Sq	0.15819668	Pr > A-Sq	>0.250

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	59.0800	58.0694
5.0	61.2400	63.7452
10.0	67.2500	66.7710
25.0	73.0300	71.8270
50.0	77.4500	77.4445
75.0	82.7800	83.0620
90.0	89.0200	88.1180
95.0	91.6300	91.1438
99.0	91.6300	96.8197

***Univariate Statistics of sasuser.b\_fitness******The UNIVARIATE Procedure***

# Univariate Statistics of sasuser.b\_fitness

## The UNIVARIATE Procedure Variable: Oxygen\_Consumption

Moments			
N	31	Sum Weights	31
Mean	47.3758065	Sum Observations	1468.65
Std Deviation	5.32777175	Variance	28.3851518
Skewness	0.43704493	Kurtosis	0.63047713
Uncorrected SS	70430.0327	Corrected SS	851.554555
Coeff Variation	11.2457648	Std Error Mean	0.95689605

Basic Statistical Measures			
Location		Variability	
Mean	47.37581	Std Deviation	5.32777
Median	46.77000	Variance	28.38515
Mode	.	Range	22.67000
		Interquartile Range	5.58000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	49.50988	Pr >  t	<.0001
Sign	M	15.5	Pr >=  M	<.0001
Signed Rank	S	248	Pr >=  S	<.0001

Quantiles (Definition 5)	
Quantile	Estimate
100% Max	60.06
99%	60.06
95%	59.57
90%	54.30
75% Q3	50.39
50% Median	46.77
25% Q1	44.81
10%	39.44
5%	39.20

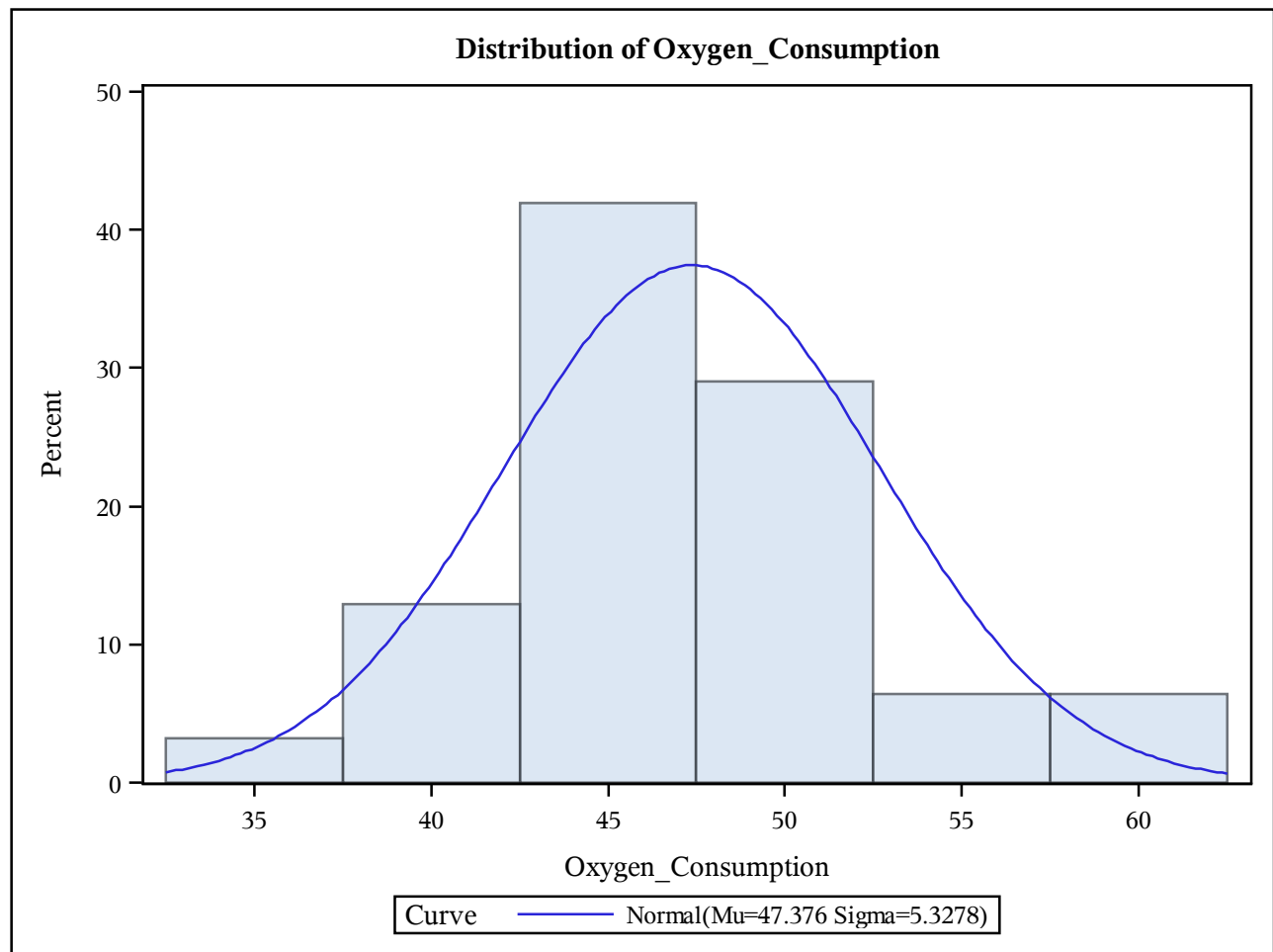


***Univariate Statistics of sasuser.b\_fitness***

***The UNIVARIATE Procedure***  
***Variable: Oxygen\_Consumption***

Quantiles (Definition 5)	
Quantile	Estimate
1%	37.39
0% Min	37.39

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
37.39	31	51.85	15
39.20	29	54.30	3
39.41	28	54.63	4
39.44	30	59.57	1
40.84	20	60.06	2

**Univariate Statistics of sasuser.b\_fitness****The UNIVARIATE Procedure**

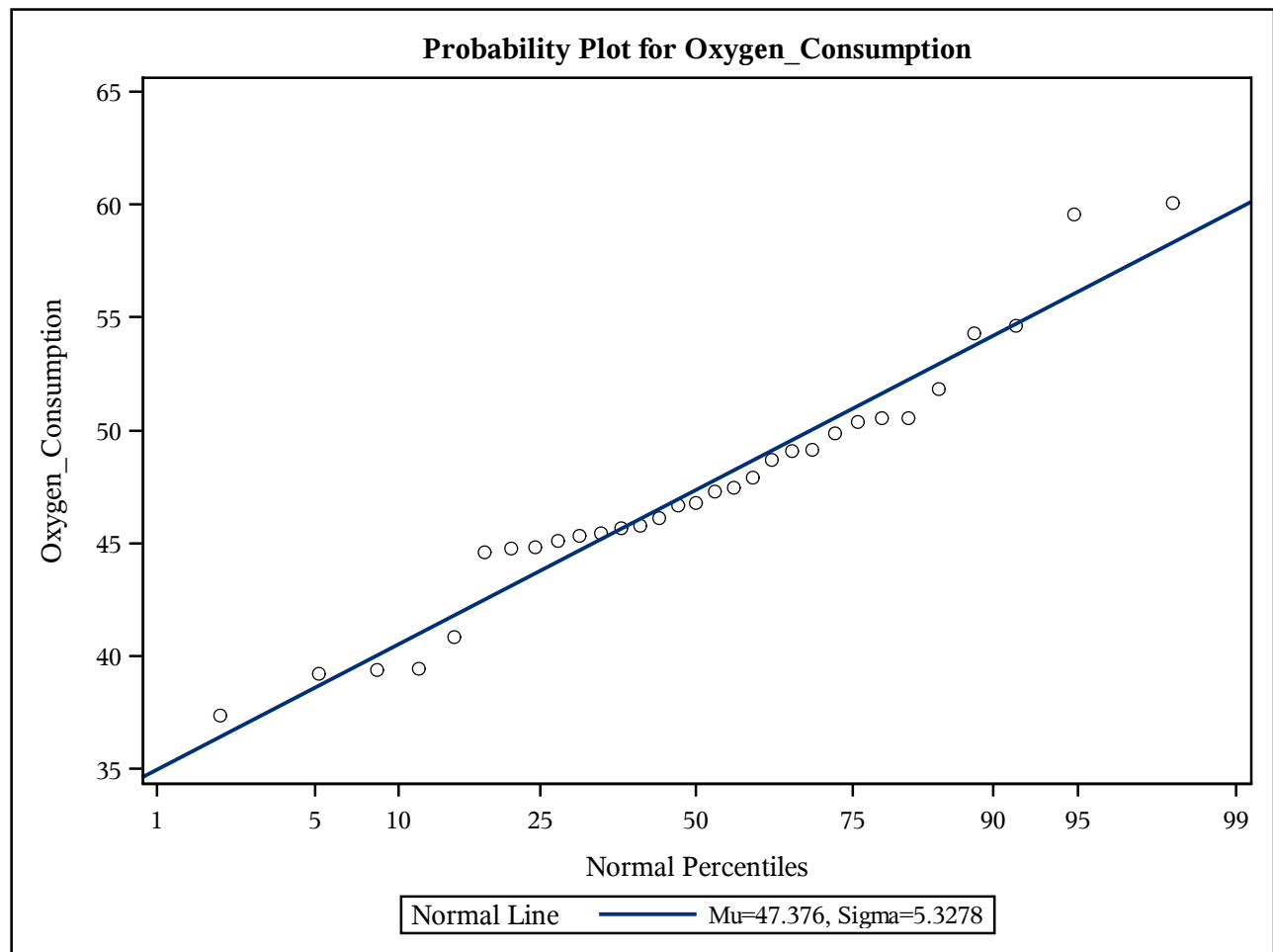
**Univariate Statistics of sasuser.b\_fitness**

**The UNIVARIATE Procedure**  
**Fitted Normal Distribution for Oxygen\_Consumption**

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	47.37581
Std Dev	Sigma	5.327772

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.14054470	Pr > D	0.119
Cramer-von Mises	W-Sq	0.08470183	Pr > W-Sq	0.179
Anderson-Darling	A-Sq	0.54029510	Pr > A-Sq	0.157

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	37.3900	34.9816
5.0	39.2000	38.6124
10.0	39.4400	40.5480
25.0	44.8100	43.7823
50.0	46.7700	47.3758
75.0	50.3900	50.9693
90.0	54.3000	54.2036
95.0	59.5700	56.1392
99.0	60.0600	59.7701

**Univariate Statistics of sasuser.b\_fitness*****The UNIVARIATE Procedure***

# Univariate Statistics of sasuser.b\_fitness

## The UNIVARIATE Procedure

Variable: Run\_Pulse

Moments			
N	31	Sum Weights	31
Mean	169.645161	Sum Observations	5259
Std Deviation	10.2519864	Variance	105.103226
Skewness	-0.3490442	Kurtosis	0.04275973
Uncorrected SS	895317	Corrected SS	3153.09677
Coeff Variation	6.04319413	Std Error Mean	1.84131112

Basic Statistical Measures			
Location		Variability	
Mean	169.6452	Std Deviation	10.25199
Median	170.0000	Variance	105.10323
Mode	162.0000	Range	40.00000
		Interquartile Range	14.00000

*Note: The mode displayed is the smallest of 2 modes with a count of 4.*

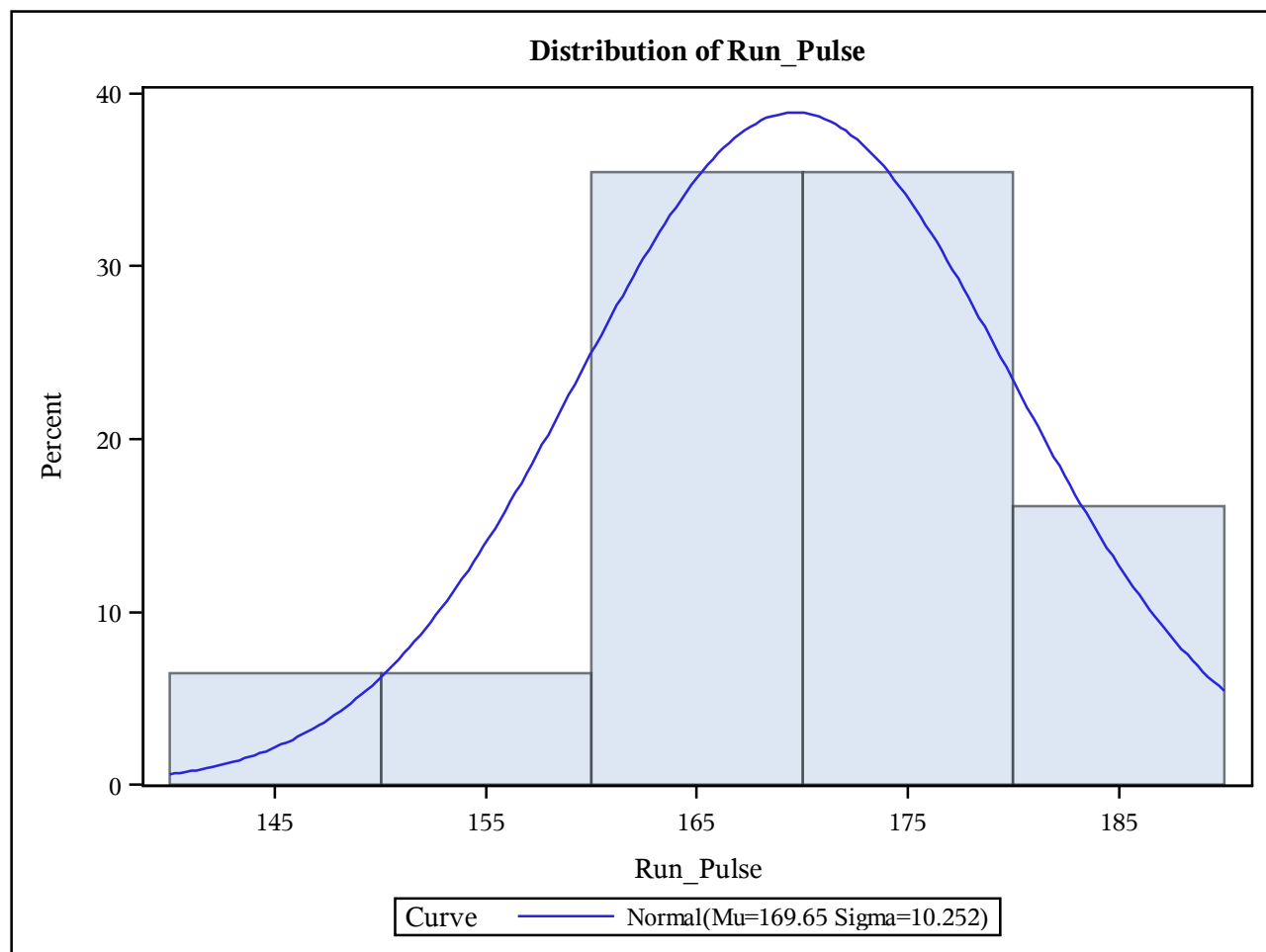
Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	92.13281	Pr >  t	<.0001
Sign	M	15.5	Pr >=  M	<.0001
Signed Rank	S	248	Pr >=  S	<.0001

Quantiles (Definition 5)	
Quantile	Estimate
100% Max	186
99%	186
95%	186
90%	185
75% Q3	176
50% Median	170
25% Q1	162
10%	156
5%	148

***Univariate Statistics of sasuser.b\_fitness******The UNIVARIATE Procedure***  
***Variable: Run\_Pulse***

Quantiles (Definition 5)	
Quantile	Estimate
1%	146
0% Min	146

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
146	4	180	5
148	9	185	11
156	23	186	7
156	3	186	16
162	19	186	31

**Univariate Statistics of sasuser.b\_fitness*****The UNIVARIATE Procedure***

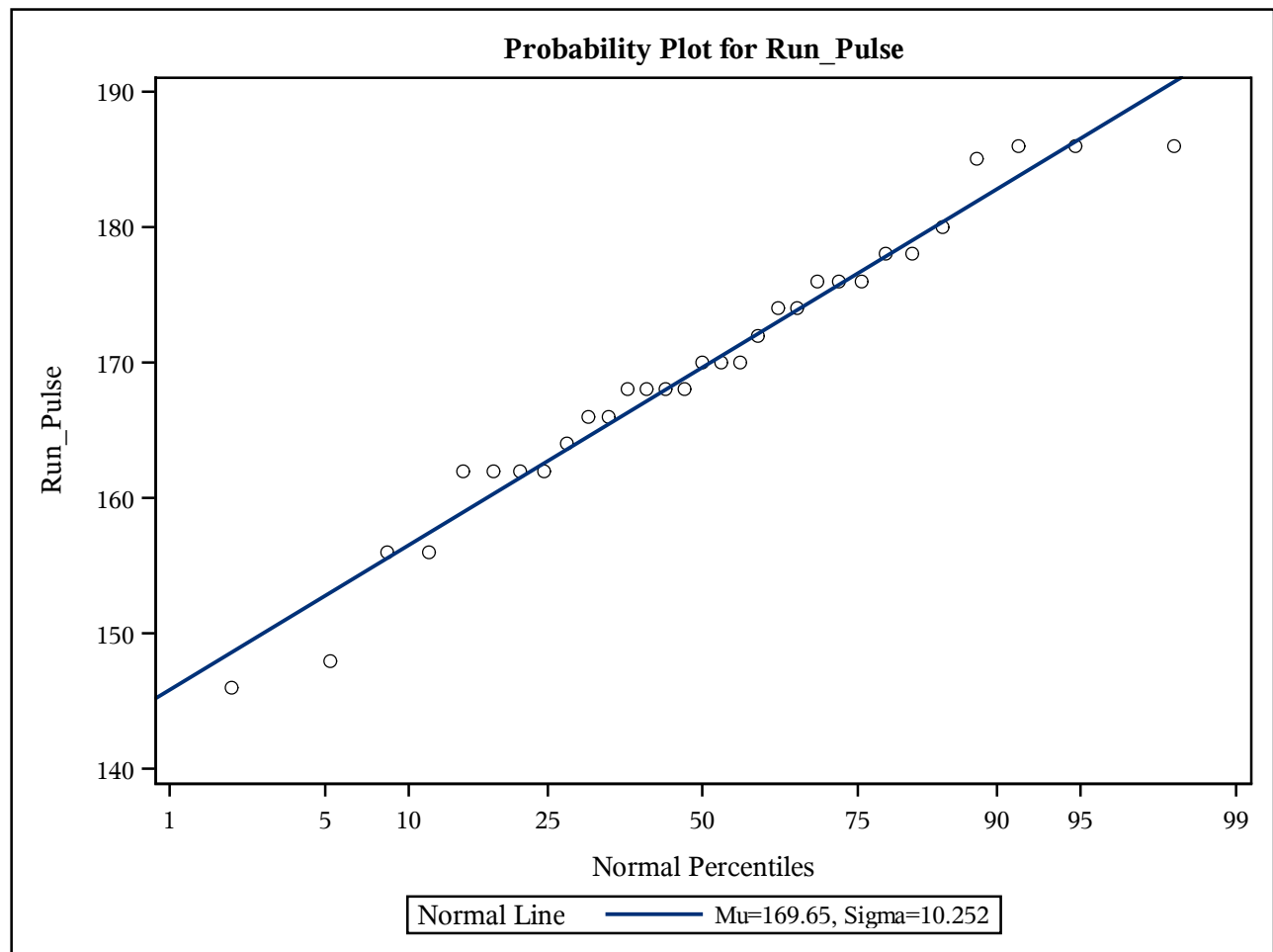
**Univariate Statistics of sasuser.b\_fitness****The UNIVARIATE Procedure**  
**Fitted Normal Distribution for Run\_Pulse**

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	169.6452
Std Dev	Sigma	10.25199

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.09888456	Pr > D	>0.150
Cramer-von Mises	W-Sq	0.03626786	Pr > W-Sq	>0.250
Anderson-Darling	A-Sq	0.29866986	Pr > A-Sq	>0.250

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	146.000	145.795
5.0	148.000	152.782
10.0	156.000	156.507
25.0	162.000	162.730
50.0	170.000	169.645
75.0	176.000	176.560
90.0	185.000	182.784
95.0	186.000	186.508
99.0	186.000	193.495



***Univariate Statistics of sasuser.b\_fitness******The UNIVARIATE Procedure***

**Univariate Statistics of sasuser.b\_fitness****The UNIVARIATE Procedure****Variable: Rest\_Pulse**

Moments			
N	31	Sum Weights	31
Mean	53.4516129	Sum Observations	1657
Std Deviation	7.61944315	Variance	58.055914
Skewness	0.37532513	Kurtosis	-0.7399667
Uncorrected SS	90311	Corrected SS	1741.67742
Coeff Variation	14.2548424	Std Error Mean	1.36849239

Basic Statistical Measures			
Location		Variability	
Mean	53.45161	Std Deviation	7.61944
Median	52.00000	Variance	58.05591
Mode	48.00000	Range	30.00000
		Interquartile Range	11.00000

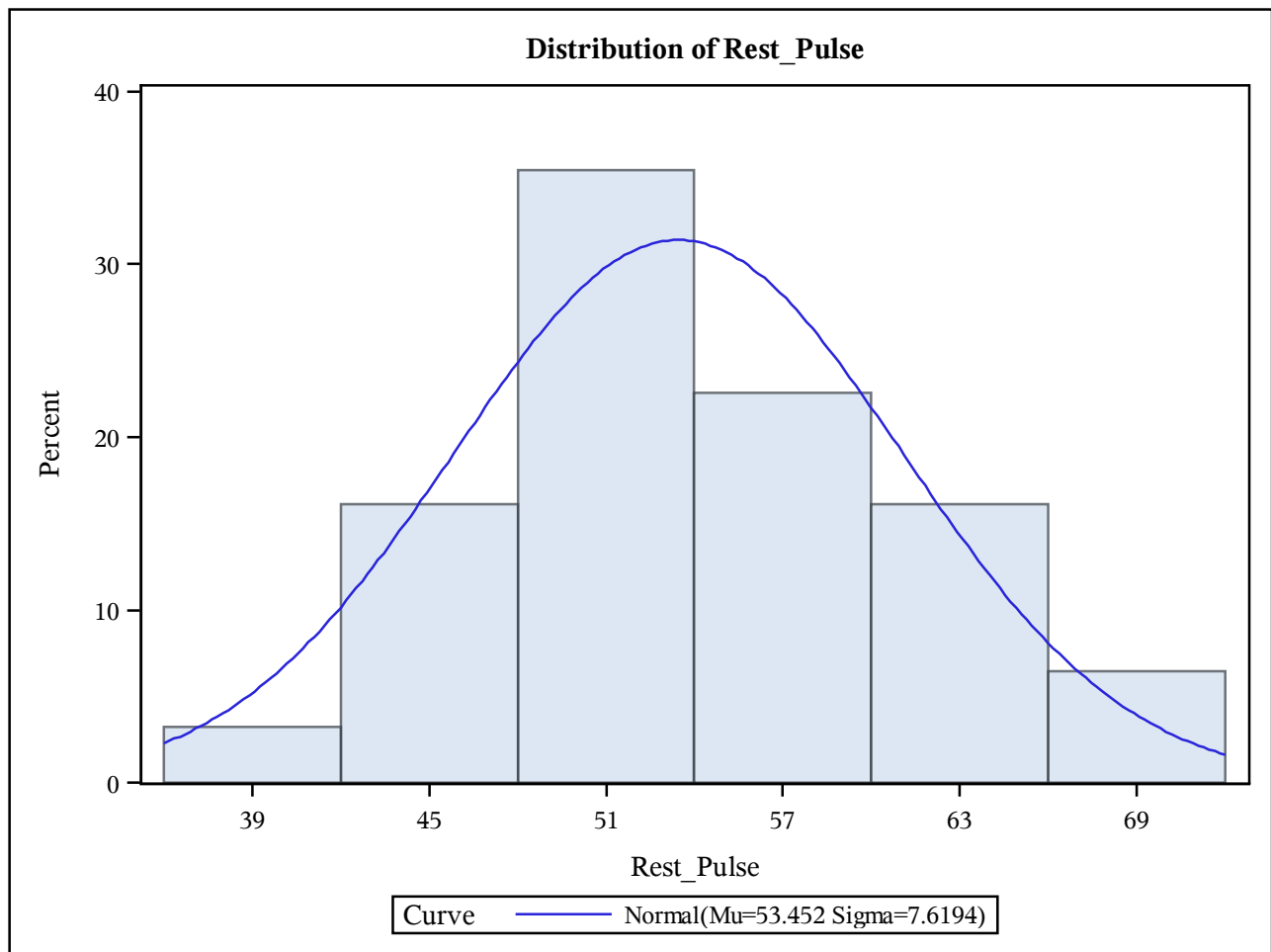
Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	39.05876	Pr >  t	<.0001
Sign	M	15.5	Pr >=  M	<.0001
Signed Rank	S	248	Pr >=  S	<.0001

Quantiles (Definition 5)	
Quantile	Estimate
100% Max	70
99%	70
95%	67
90%	63
75% Q3	59
50% Median	52
25% Q1	48
10%	45
5%	44

***Univariate Statistics of sasuser.b\_fitness******The UNIVARIATE Procedure***  
***Variable: Rest\_Pulse***

Quantiles (Definition 5)	
Quantile	Estimate
1%	40
0% Min	40

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
40	1	62	24
44	29	63	30
44	5	64	19
45	13	67	12
45	3	70	27

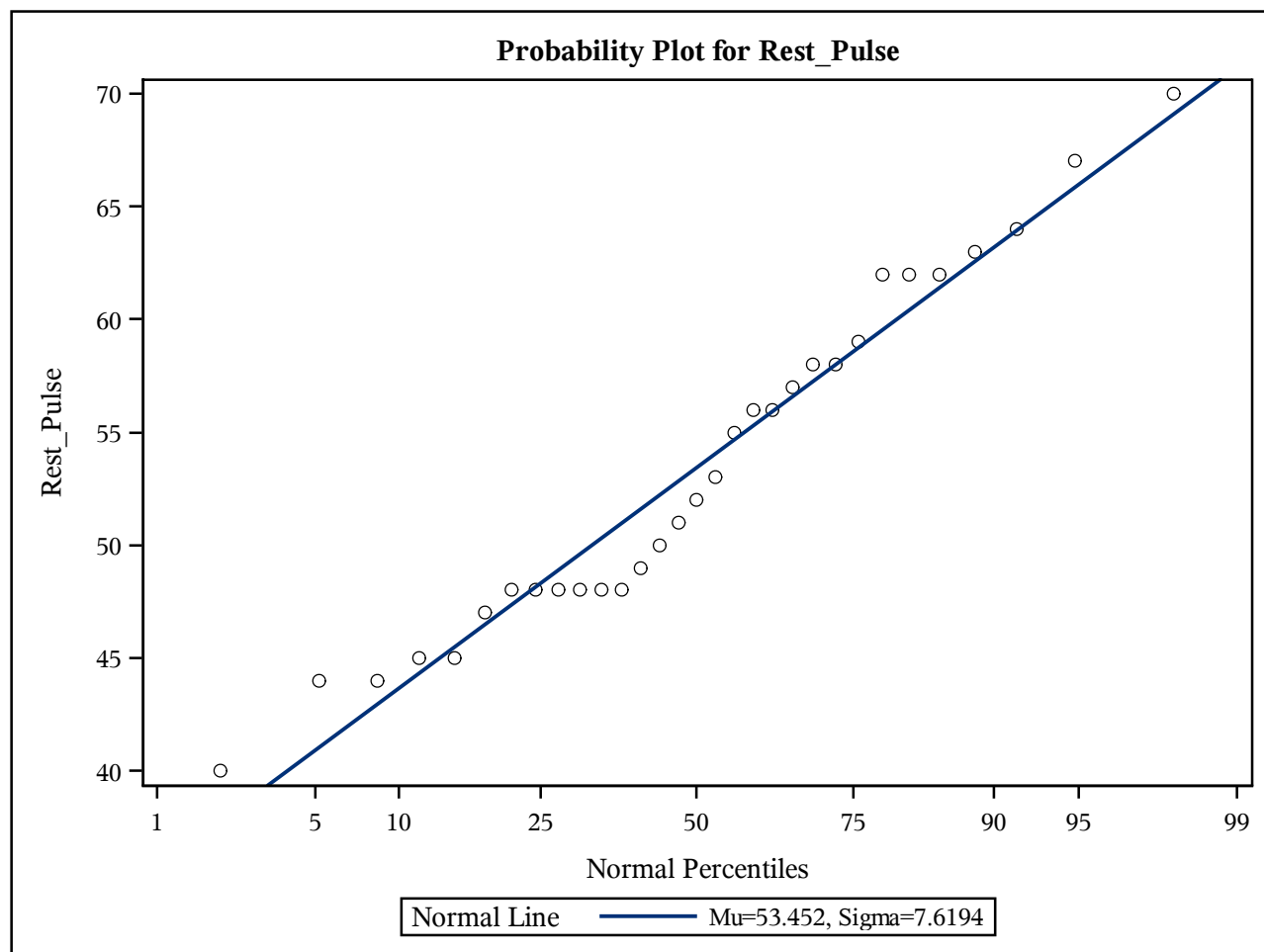
**Univariate Statistics of sasuser.b\_fitness*****The UNIVARIATE Procedure***

**Univariate Statistics of sasuser.b\_fitness****The UNIVARIATE Procedure  
Fitted Normal Distribution for Rest\_Pulse**

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	53.45161
Std Dev	Sigma	7.619443

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.14994270	Pr > D	0.076
Cramer-von Mises	W-Sq	0.10022641	Pr > W-Sq	0.108
Anderson-Darling	A-Sq	0.56607714	Pr > A-Sq	0.136

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	40.0000	35.7261
5.0	44.0000	40.9187
10.0	45.0000	43.6869
25.0	48.0000	48.3124
50.0	52.0000	53.4516
75.0	59.0000	58.5908
90.0	63.0000	63.2163
95.0	67.0000	65.9845
99.0	70.0000	71.1771

**Univariate Statistics of sasuser.b\_fitness*****The UNIVARIATE Procedure***

# Univariate Statistics of sasuser.b\_fitness

## The UNIVARIATE Procedure Variable: Maximum\_Pulse

Moments			
N	31	Sum Weights	31
Mean	173.774194	Sum Observations	5387
Std Deviation	9.16409544	Variance	83.9806452
Skewness	0.01898547	Kurtosis	-0.2344884
Uncorrected SS	938641	Corrected SS	2519.41935
Coeff Variation	5.27356522	Std Error Mean	1.64592013

Basic Statistical Measures			
Location		Variability	
Mean	173.7742	Std Deviation	9.16410
Median	172.0000	Variance	83.98065
Mode	172.0000	Range	37.00000
		Interquartile Range	12.00000

*Note: The mode displayed is the smallest of 2 modes with a count of 5.*

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	105.5788	Pr >  t	<.0001
Sign	M	15.5	Pr >=  M	<.0001
Signed Rank	S	248	Pr >=  S	<.0001

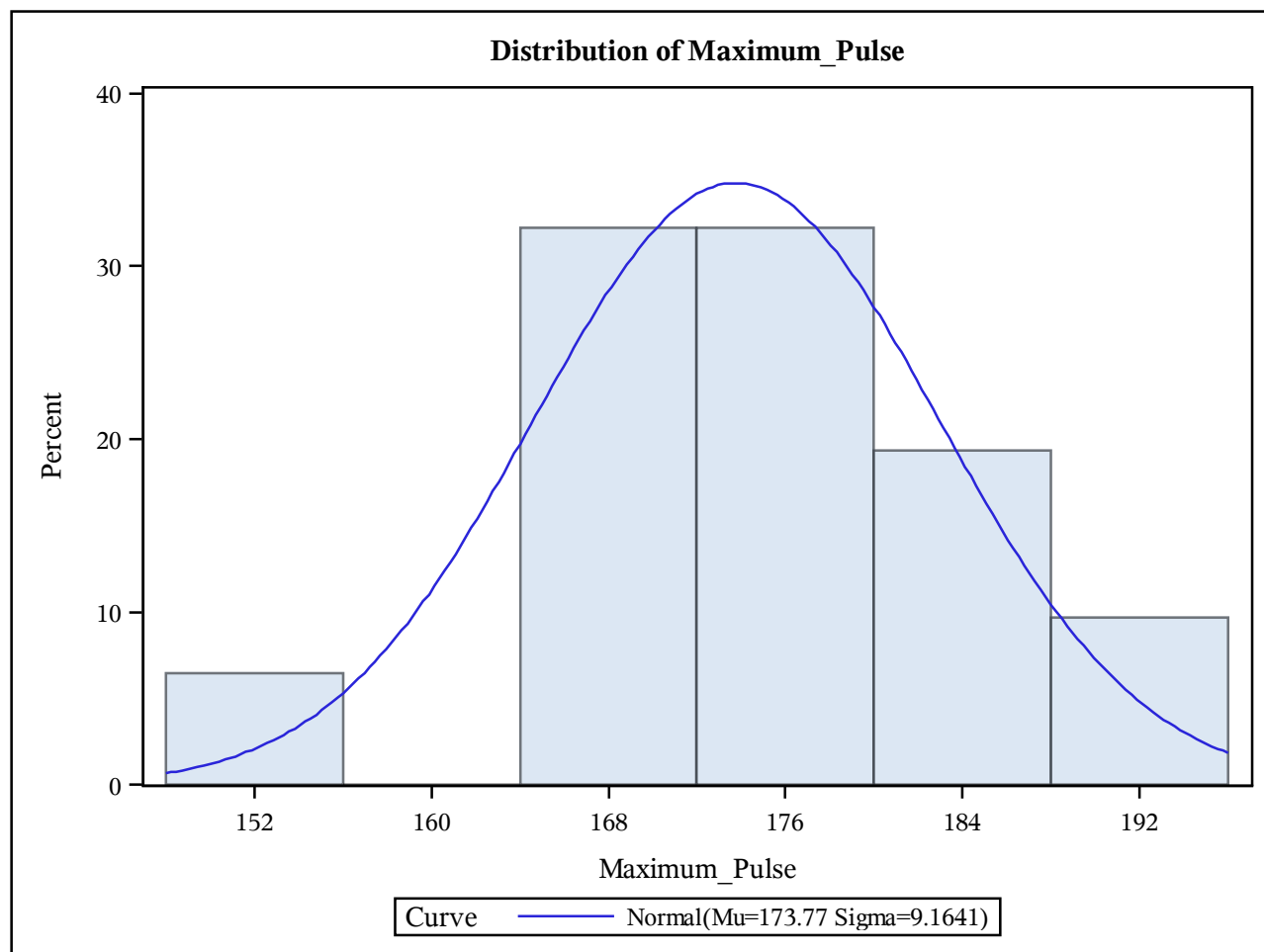
Quantiles (Definition 5)	
Quantile	Estimate
100% Max	192
99%	192
95%	188
90%	186
75% Q3	180
50% Median	172
25% Q1	168
10%	164
5%	155

***Univariate Statistics of sasuser.b\_fitness******The UNIVARIATE Procedure***  
***Variable: Maximum\_Pulse***

Quantiles (Definition 5)	
Quantile	Estimate
1%	155
0% Min	155

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
155	9	185	11
155	4	186	2
164	18	188	7
164	14	188	16
165	23	192	31



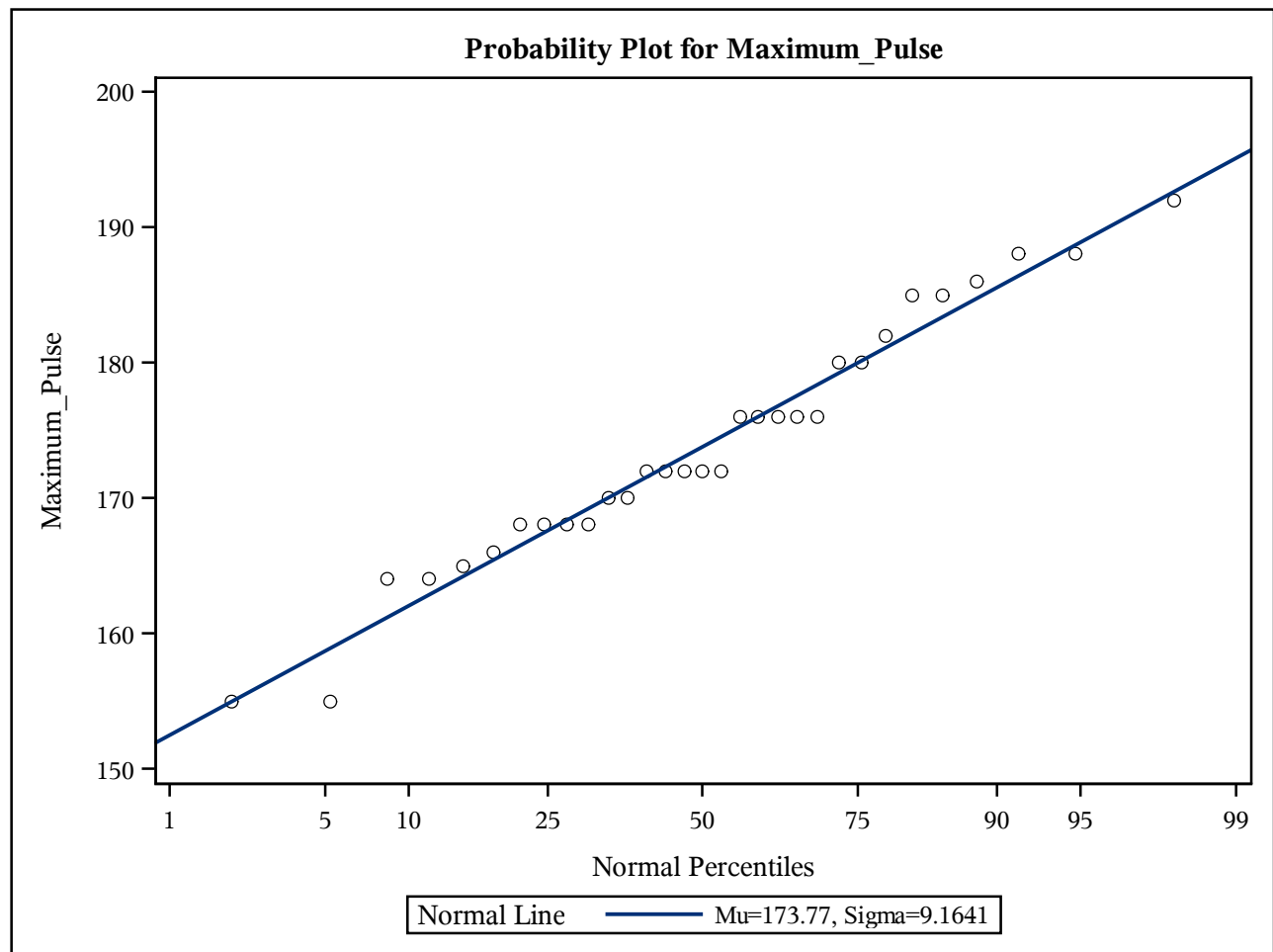
**Univariate Statistics of sasuser.b\_fitness*****The UNIVARIATE Procedure***

**Univariate Statistics of sasuser.b\_fitness****The UNIVARIATE Procedure**  
**Fitted Normal Distribution for Maximum\_Pulse**

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	173.7742
Std Dev	Sigma	9.164095

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.12514360	Pr > D	>0.150
Cramer-von Mises	W-Sq	0.05993706	Pr > W-Sq	>0.250
Anderson-Darling	A-Sq	0.37043711	Pr > A-Sq	>0.250

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	155.000	152.455
5.0	155.000	158.701
10.0	164.000	162.030
25.0	168.000	167.593
50.0	172.000	173.774
75.0	180.000	179.955
90.0	186.000	185.518
95.0	188.000	188.848
99.0	192.000	195.093

**Univariate Statistics of sasuser.b\_fitness*****The UNIVARIATE Procedure***

# Univariate Statistics of sasuser.b\_fitness

## The UNIVARIATE Procedure Variable: Performance

Moments			
N	31	Sum Weights	31
Mean	8	Sum Observations	248
Std Deviation	3.11982906	Variance	9.73333333
Skewness	-0.3590637	Kurtosis	0.56066952
Uncorrected SS	2276	Corrected SS	292
Coeff Variation	38.9978632	Std Error Mean	0.56033784

Basic Statistical Measures			
Location		Variability	
Mean	8.000000	Std Deviation	3.11983
Median	8.000000	Variance	9.73333
Mode	9.000000	Range	14.00000
		Interquartile Range	4.00000

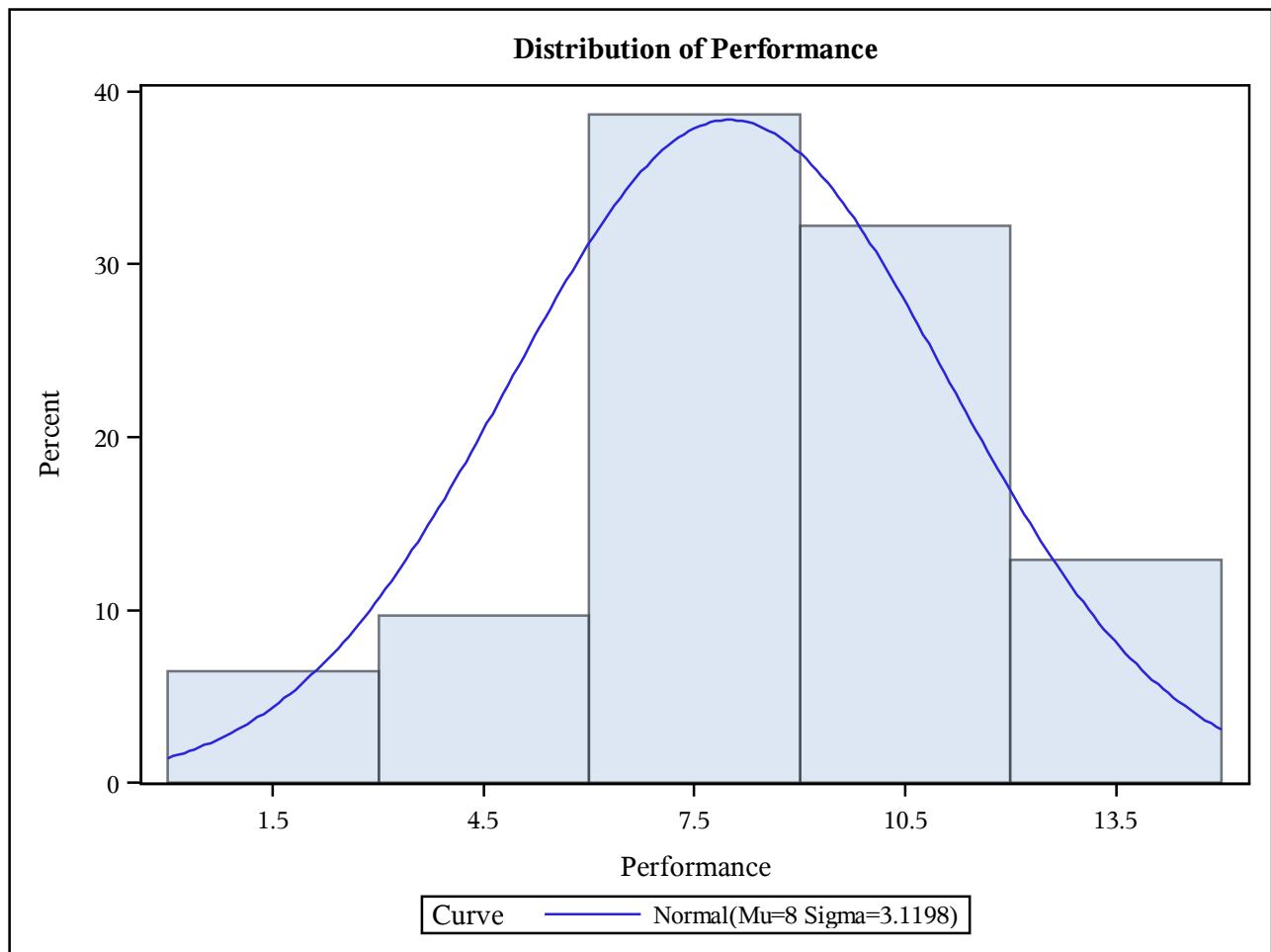
Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	14.2771	Pr >  t	<.0001
Sign	M	15	Pr >=  M	<.0001
Signed Rank	S	232.5	Pr >=  S	<.0001

Quantiles (Definition 5)	
Quantile	Estimate
100% Max	14
99%	14
95%	13
90%	12
75% Q3	10
50% Median	8
25% Q1	6
10%	4
5%	2

***Univariate Statistics of sasuser.b\_fitness******The UNIVARIATE Procedure***  
***Variable: Performance***

Quantiles (Definition 5)	
Quantile	Estimate
1%	0
0% Min	0

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
0	31	11	5
2	30	12	6
4	29	13	2
4	28	13	3
5	27	14	1

**Univariate Statistics of sasuser.b\_fitness*****The UNIVARIATE Procedure***

**Univariate Statistics of sasuser.b\_fitness****The UNIVARIATE Procedure**  
**Fitted Normal Distribution for Performance**

Parameters for Normal Distribution		
Parameter	Symbol	Estimate
Mean	Mu	8
Std Dev	Sigma	3.119829

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.11621864	Pr > D	>0.150
Cramer-von Mises	W-Sq	0.06227045	Pr > W-Sq	>0.250
Anderson-Darling	A-Sq	0.35370447	Pr > A-Sq	>0.250

Quantiles for Normal Distribution		
Percent	Quantile	
	Observed	Estimated
1.0	0.0000	0.74219
5.0	2.0000	2.86834
10.0	4.0000	4.00178
25.0	6.0000	5.89571
50.0	8.0000	8.00000
75.0	10.0000	10.10429
90.0	12.0000	11.99822
95.0	13.0000	13.13166
99.0	14.0000	15.25781

**Univariate Statistics of sasuser.b\_fitness****The UNIVARIATE Procedure**