Obs	Hours	Scores
1	2.5	21
2	5.1	47
3	3.2	27
4	8.5	75
5	3.5	30
6	1.5	20
7	9.2	88
8	5.5	60
9	8.3	81
10	2.7	25
11	7.7	85
12	5.9	62
13	4.5	41
14	3.3	42
15	1.1	17
16	8.9	95
17	2.5	30
18	1.9	24
19	6.1	67
20	7.4	69
21	2.7	30
22	4.8	54
23	3.8	35
24	6.9	76
25	7.8	86

Hours vs Percentage

Hours vs Percentage

Study Profile
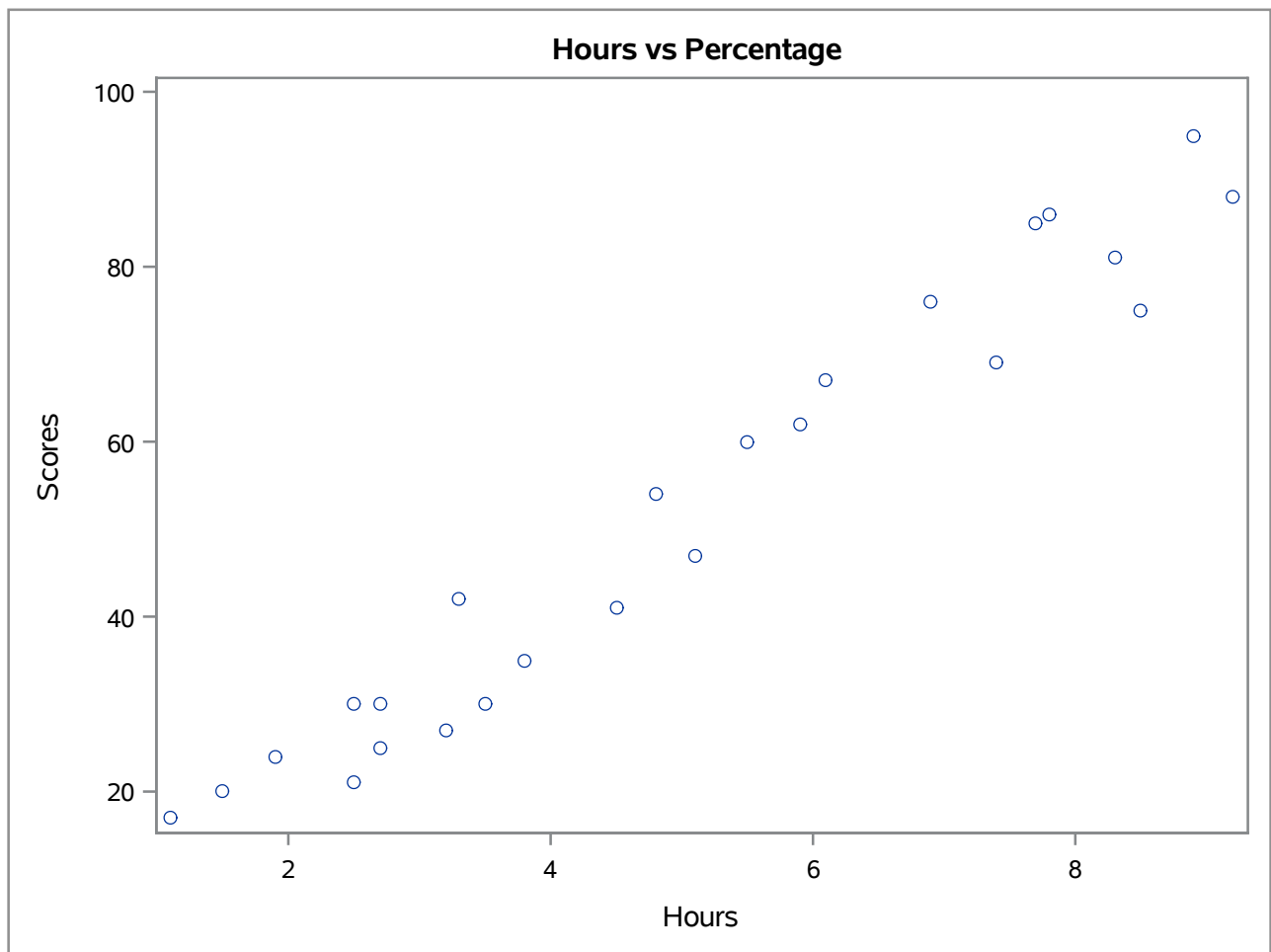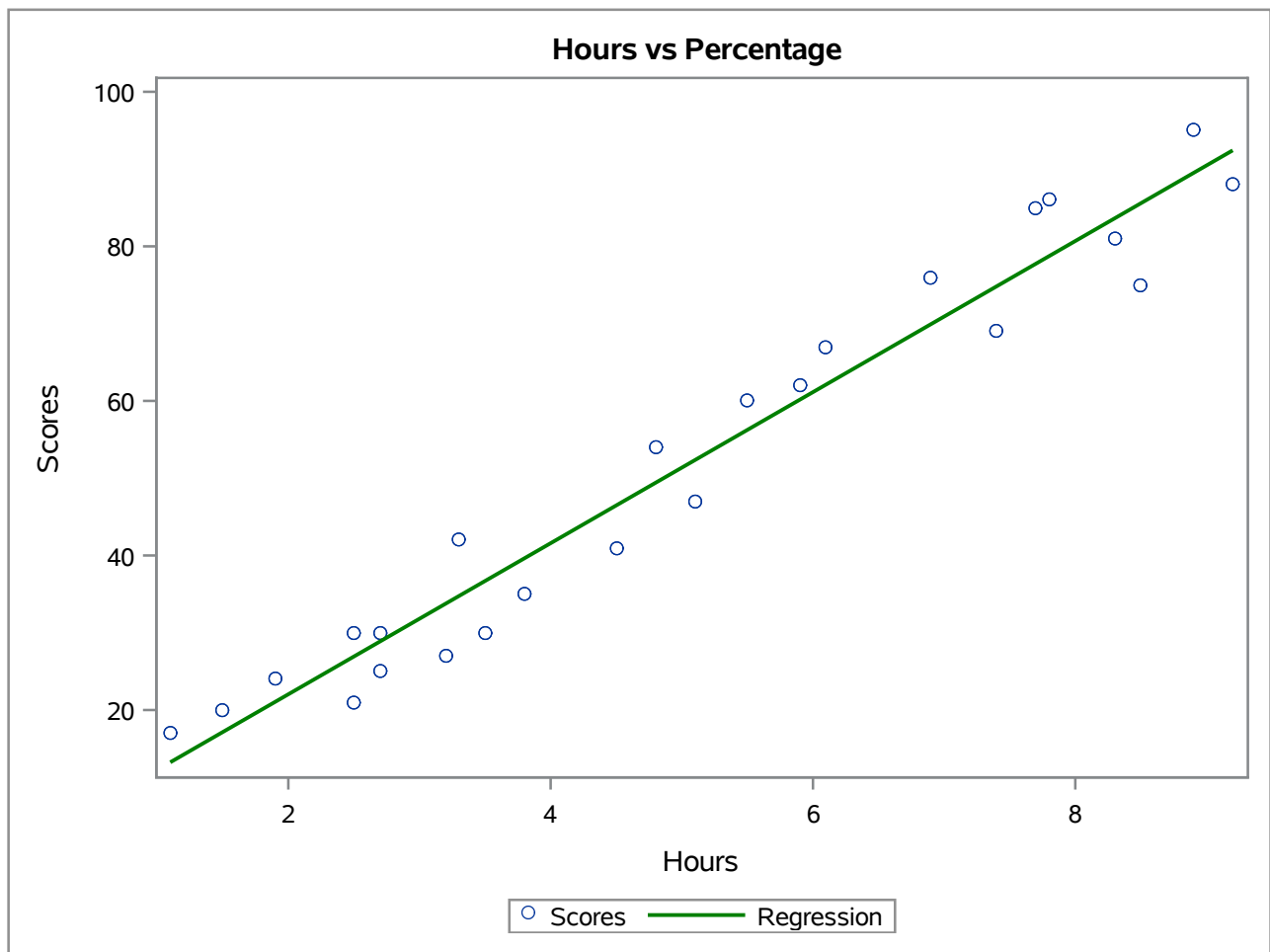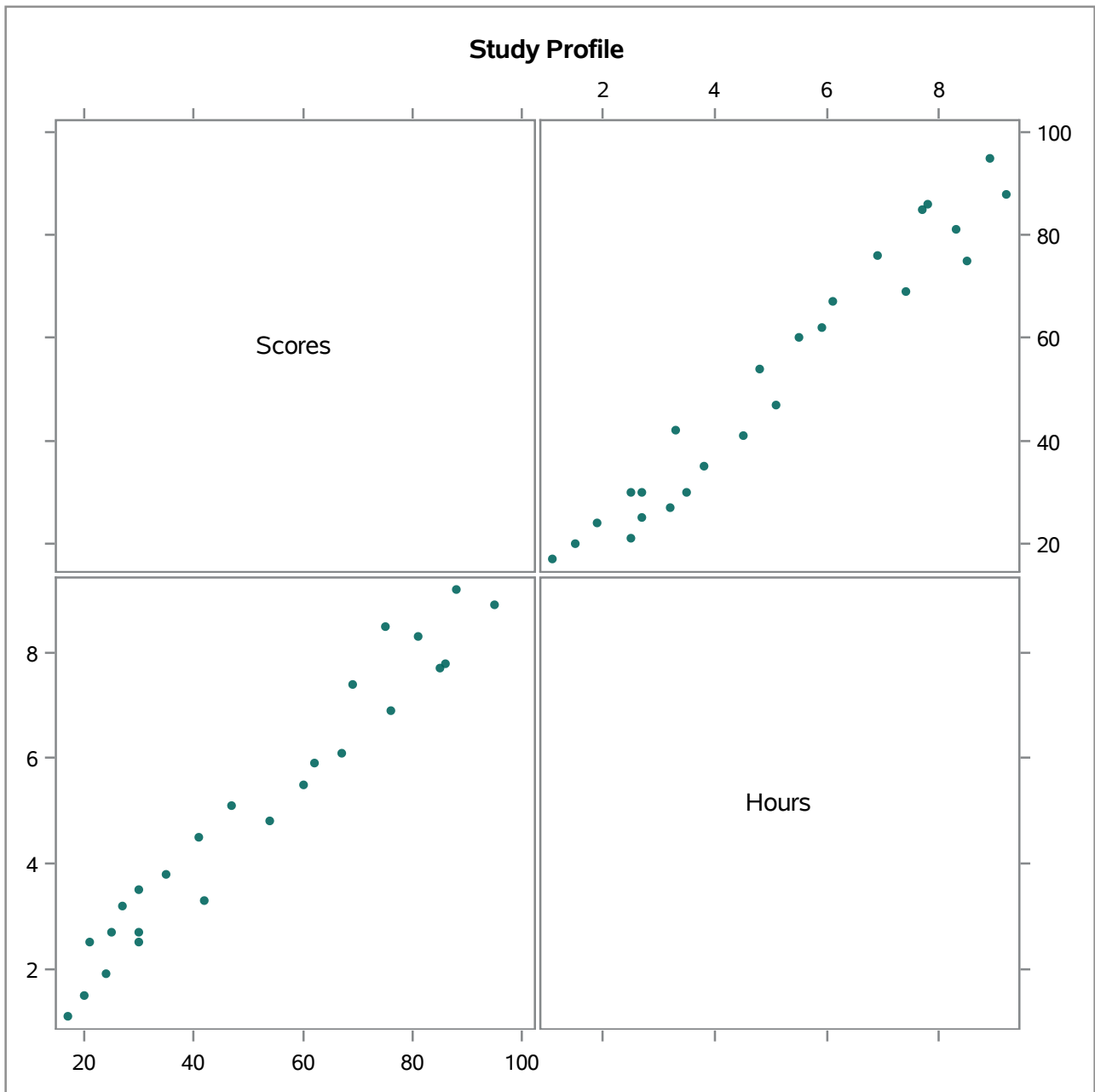
The REG Procedure
Model: MODEL1
Dependent Variable: Scores

Number of Observations Read	25
Number of Observations Used	25

Analysis of Variance					
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Pr > F**
Model	1	14624	14624	465.82	<.0001
Error	23	722.06826	31.39427		
Corrected Total	24	15346			

Root MSE	5.60306	**R-Square**	0.9529
Dependent Mean	51.48000	**Adj R-Sq**	0.9509
Coeff Var	10.88395		

Parameter Estimates					
Variable	**DF**	**Parameter Estimate**	**Standard Error**	**t Value**	**Pr > |t|**
Intercept	1	2.48367	2.53166	0.98	0.3368
Hours	1	9.77580	0.45294	21.58	<.0001

The REG Procedure
Model: MODEL1
Dependent Variable: Scores

Output Statistics			
Obs	**Dependent Variable**	**Predicted Value**	**Residual**
1	21	26.9232	-5.9232
2	47	52.3403	-5.3403
3	27	33.7662	-6.7662
4	75	85.5780	-10.5780
5	30	36.6990	-6.6990
6	20	17.1474	2.8526
7	88	92.4211	-4.4211
8	60	56.2506	3.7494
9	81	83.6228	-2.6228
10	25	28.8783	-3.8783
11	85	77.7574	7.2426
12	62	60.1609	1.8391
13	41	46.4748	-5.4748
14	42	34.7438	7.2562
15	17	13.2371	3.7629
16	95	89.4883	5.5117
17	30	26.9232	3.0768
18	24	21.0577	2.9423
19	67	62.1161	4.8839
20	69	74.8246	-5.8246
21	30	28.8783	1.1217
22	54	49.4075	4.5925
23	35	39.6317	-4.6317
24	76	69.9367	6.0633
25	86	78.7349	7.2651

Sum of Residuals	0
Sum of Squared Residuals	722.06826
Predicted Residual SS (PRESS)	859.40049

The REG Procedure
Model: MODEL1

Fit Diagnostics for Scores
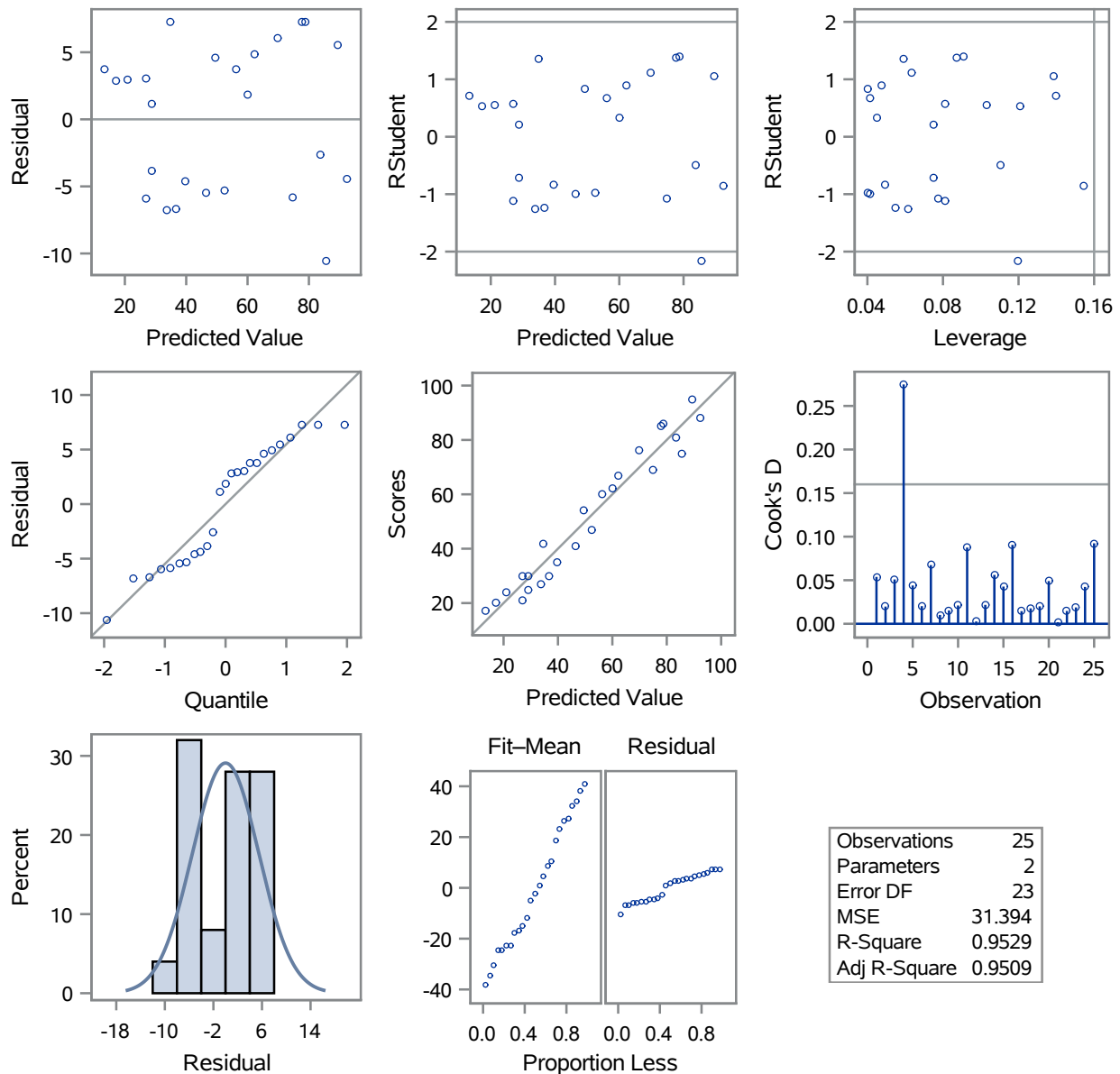
The REG Procedure
Model: MODEL1

Residuals for Scores

Fit Plot for Scores

Observations	25
Parameters	2
Error DF	23
MSE	31.394
R-Square	0.9529
Adj R-Square	0.9509

Fit   ☐ 95% Confidence Limits   – – – 95% Prediction Limits
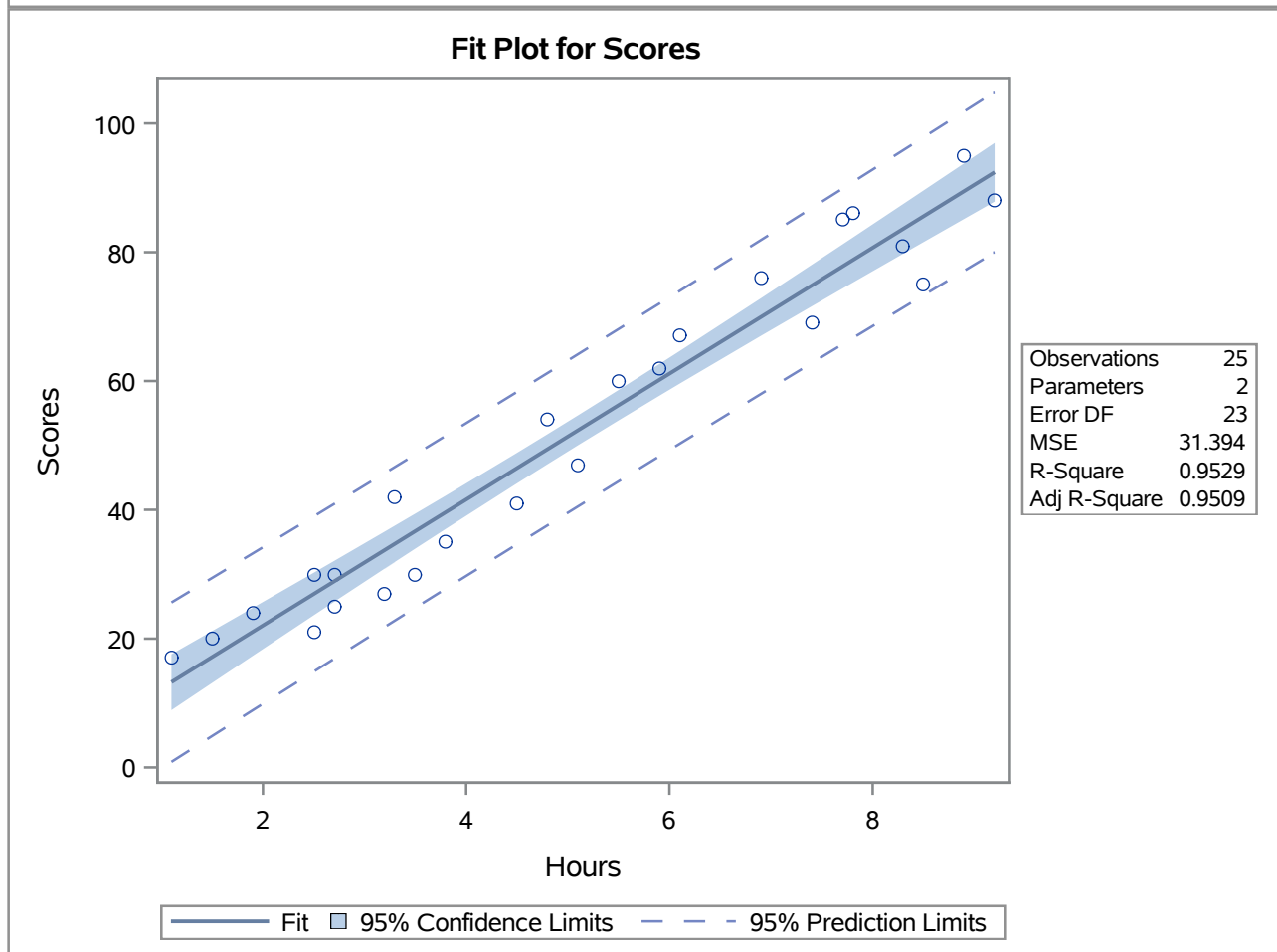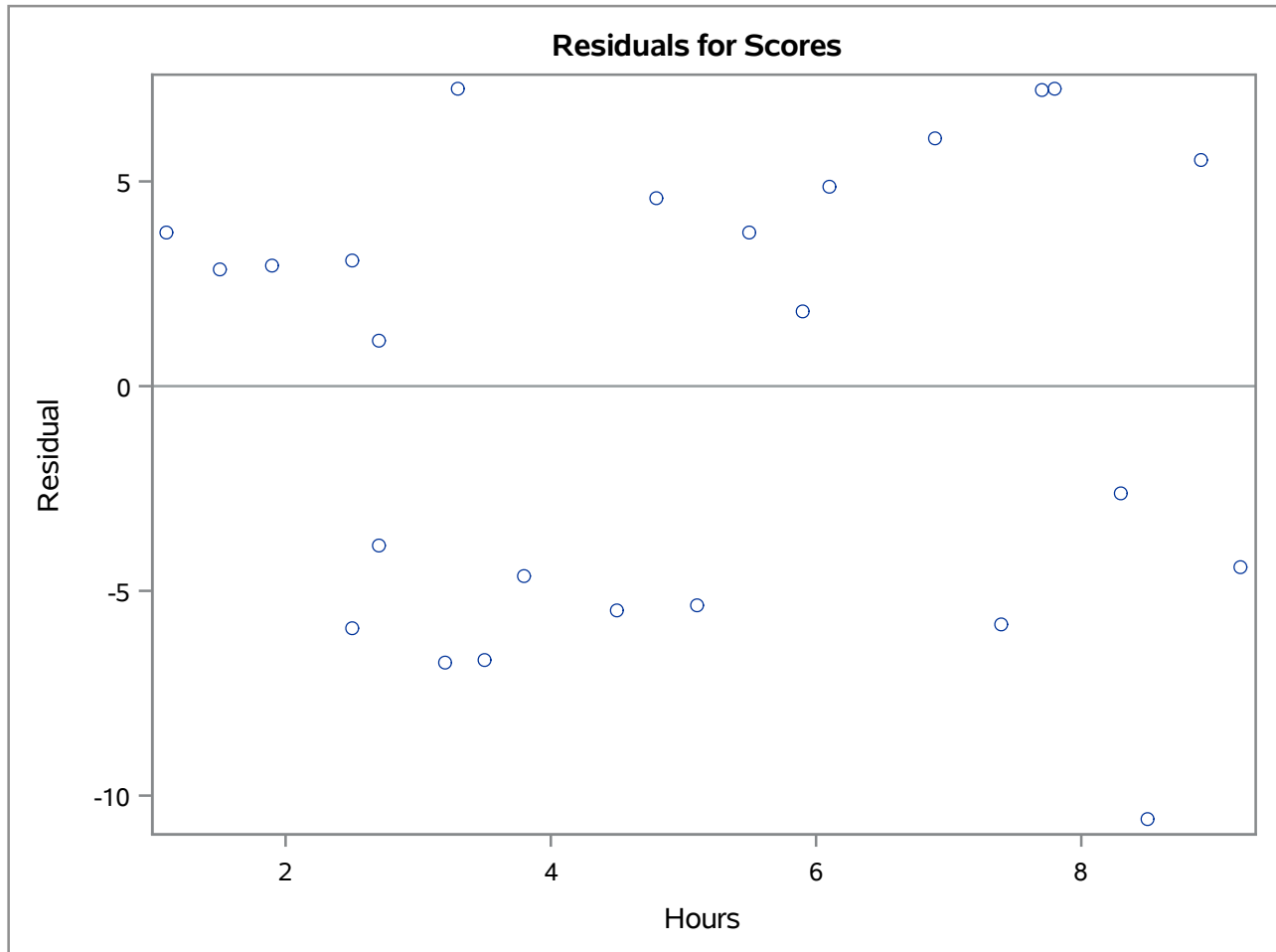
Data Set	WORK.STUDENT_SCORES
Dependent Variable	Scores
Selection Method	None

Number of Observations Read	25
Number of Observations Used	25

Dimensions	
Number of Effects	2
Number of Parameters	2

Data Set	WORK.STUDENT_SCORES
Dependent Variable	Scores
Selection Method	None

Least Squares Summary			
Step	**Effect Entered**	**Number Effects In**	**SBC**
0	Intercept	1	163.7126
1	Hours	2	90.5188*
* Optimal Value of Criterion			

Least Squares Model (No Selection)

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	14624	14624	465.82	<.0001
Error	23	722.06826	31.39427		
Corrected Total	24	15346			

Root MSE	5.60306
Dependent Mean	51.48000
R-Square	0.9529
Adj R-Sq	0.9509
AIC	115.08110
AICC	116.22395
SBC	90.51885

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	2.483673	2.531663	0.98	0.3368
Hours	1	9.775803	0.452941	21.58	<.0001

Score Information	
Input Data Set	WORK.STUDENT_SCORES
Output Data Set	WORK.STUDENT_SCORES1
Number of Observations Read	25
Number of Observations Scored	25
Number of Residuals Computed	25
Residual Sum of Squares	722.06826

Obs	Hours	Scores	p_Scores	r_Scores
1	2.5	21	26.9232	-5.9232
2	5.1	47	52.3403	-5.3403
3	3.2	27	33.7662	-6.7662
4	8.5	75	85.5780	-10.5780
5	3.5	30	36.6990	-6.6990
6	1.5	20	17.1474	2.8526
7	9.2	88	92.4211	-4.4211
8	5.5	60	56.2506	3.7494
9	8.3	81	83.6228	-2.6228
10	2.7	25	28.8783	-3.8783
11	7.7	85	77.7574	7.2426
12	5.9	62	60.1609	1.8391
13	4.5	41	46.4748	-5.4748
14	3.3	42	34.7438	7.2562
15	1.1	17	13.2371	3.7629
16	8.9	95	89.4883	5.5117
17	2.5	30	26.9232	3.0768
18	1.9	24	21.0577	2.9423
19	6.1	67	62.1161	4.8839
20	7.4	69	74.8246	-5.8246
21	2.7	30	28.8783	1.1217
22	4.8	54	49.4075	4.5925
23	3.8	35	39.6317	-4.6317
24	6.9	76	69.9367	6.0633
25	7.8	86	78.7349	7.2651

Predicted score(Y) of Student on the Basis of Hours(X1)

Obs	x1	y
1	9.25	92.895