Output From Proc Reg for Bodyfat Example

The REG Procedure
Model: MODEL1
Dependent Variable: y

Number of Observations Read	21
Number of Observations Used	20
Number of Observations with Missing Values	1

Analysis of Variance					
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Pr > F**
Model	1	352.26980	352.26980	44.30	<.0001
Error	18	143.11970	7.95109		
Corrected Total	19	495.38950			

Root MSE	2.81977	**R-Square**	0.7111
Dependent Mean	20.19500	**Adj R-Sq**	0.6950
Coeff Var	13.96271		

Parameter Estimates					
Variable	**DF**	**Parameter Estimate**	**Standard Error**	**t Value**	**Pr > |t|**
Intercept	1	-1.49610	3.31923	-0.45	0.6576
x1	1	0.85719	0.12878	6.66	<.0001

Covariance of Estimates		
Variable	**Intercept**	**x1**
Intercept	11.01731839	-0.419670565
x1	-0.419670565	0.0165844918

Output From Proc Reg for Bodyfat Example

The REG Procedure
Model: MODEL2
Dependent Variable: y

Number of Observations Read	21
Number of Observations Used	20
Number of Observations with Missing Values	1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	381.96582	381.96582	60.62	<.0001
Error	18	113.42368	6.30132		
Corrected Total	19	495.38950			

Root MSE	2.51024	**R-Square**	0.7710
Dependent Mean	20.19500	**Adj R-Sq**	0.7583
Coeff Var	12.43002		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	-23.63449	5.65741	-4.18	0.0006
x2	1	0.85655	0.11002	7.79	<.0001

Covariance of Estimates

Variable	Intercept	x2
Intercept	32.006329324	-0.619332881
x2	-0.619332881	0.0121034372

The REG Procedure
Model: MODEL3
Dependent Variable: y

Number of Observations Read	21
Number of Observations Used	20
Number of Observations with Missing Values	1

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	10.05160	10.05160	0.37	0.5491
Error	18	485.33790	26.96322		
Corrected Total	19	495.38950			

Root MSE	5.19261	R-Square	0.0203
Dependent Mean	20.19500	Adj R-Sq	-0.0341
Coeff Var	25.71236		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	14.68678	9.09593	1.61	0.1238
x3	1	0.19943	0.32663	0.61	0.5491

Covariance of Estimates		
Variable	Intercept	x3
Intercept	82.735867956	-2.946694682
x3	-2.946694682	0.1066869907

Output From Proc Reg for Bodyfat Example

The REG Procedure
Model: MODEL4
Dependent Variable: y

Number of Observations Read	21
Number of Observations Used	20
Number of Observations with Missing Values	1

Analysis of Variance					
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**	**Pr > F**
Model	2	385.43871	192.71935	29.80	<.0001
Error	17	109.95079	6.46769		
Corrected Total	19	495.38950			

Root MSE	2.54317	**R-Square**	0.7781
Dependent Mean	20.19500	**Adj R-Sq**	0.7519
Coeff Var	12.59305		

Parameter Estimates					
Variable	**DF**	**Parameter Estimate**	**Standard Error**	**t Value**	**Pr > |t|**
Intercept	1	-19.17425	8.36064	-2.29	0.0348
x1	1	0.22235	0.30344	0.73	0.4737
x2	1	0.65942	0.29119	2.26	0.0369

Covariance of Estimates			
Variable	**Intercept**	**x1**	**x2**
Intercept	69.900312587	1.8469661215	-2.273097628
x1	1.8469661215	0.0920751757	-0.081628463
x2	-2.273097628	-0.081628463	0.0847900309

Output From Proc Reg for Bodyfat Example

The REG Procedure
Model: MODEL5
Dependent Variable: y

Number of Observations Read	21
Number of Observations Used	20
Number of Observations with Missing Values	1

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	396.98461	132.32820	21.52	<.0001
Error	16	98.40489	6.15031		
Corrected Total	19	495.38950			

Root MSE	2.47998	**R-Square**	0.8014
Dependent Mean	20.19500	**Adj R-Sq**	0.7641
Coeff Var	12.28017		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	117.08469	99.78240	1.17	0.2578
x1	1	4.33409	3.01551	1.44	0.1699
x2	1	-2.85685	2.58202	-1.11	0.2849
x3	1	-2.18606	1.59550	-1.37	0.1896

Covariance of Estimates

Variable	Intercept	x1	x2	x3
Intercept	9956.5279384	300.1979628	-257.3823153	-158.6704127
x1	300.1979628	9.0933087788	-7.779145105	-4.7880263
x2	-257.3823153	-7.779145105	6.6668028532	4.0946155019
x3	-158.6704127	-4.7880263	4.0946155019	2.545617053