

James Hahn

STAT1221

Homework 4 – MINITAB output

Chapter 8

1b)

Regression Analysis: SBP versus Age Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	1	3862	3861.63	45.18	0.000
Age	1	3862	3861.63	45.18	0.000
Error	30	2564	85.48		
Lack-of-Fit	20	1491	74.53	0.69	0.767
Pure Error	10	1074	107.37		
Total	31	6426			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
9.24543	60.09%	58.76%	54.31%

Regression Analysis: SBP versus Age, SMK Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	2	4689.7	2344.84	39.16	0.000
Age	1	4296.6	4296.59	71.76	0.000
SMK	1	828.1	828.05	13.83	0.001
Error	29	1736.3	59.87		
Lack-of-Fit	25	1294.3	51.77	0.47	0.894
Pure Error	4	442.0	110.50		
Total	31	6426.0			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
7.73769	72.98%	71.12%	67.37%

Regression Analysis: SBP versus Age, SMK, QUET

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	3	4889.8	1629.94	29.71	0.000
Age	1	769.5	769.46	14.03	0.001
SMK	1	769.2	769.23	14.02	0.001
QUET	1	200.1	200.14	3.65	0.066
Error	28	1536.1	54.86		
Total	31	6426.0			

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
7.40691	76.09%	73.53%	66.22%