

## Models for MDBH

**Response: MDBH**  
**Explanatory: X3, X1**

### Summary of Fit

RSquare	0.802601
RSquare Adj	0.779378
Root Mean Square Error	0.347265
Mean of Response	6.265
Observations (or Sum Wgts)	20

### Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	2	8.335414	4.16771	34.5600
Error	17	2.050086	0.12059	Prob > F
C. Total	19	10.385500		<.0001

### Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	3.1432107	0.408153	7.70	<.0001
X3	22.953752	5.463763	4.20	0.0006
X1	0.0313664	0.010892	2.88	0.0104

### Effect Tests

Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
X3	1	1	2.1283687	17.6491	0.0006
X1	1	1	1.0001590	8.2937	0.0104

**Response: MDBH**  
**Explanatory: X3, X2**

### Summary of Fit

RSquare	0.74513
RSquare Adj	0.715146
Root Mean Square Error	0.394592
Mean of Response	6.265
Observations (or Sum Wgts)	20

### Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	2	7.738551	3.86928	24.8504
Error	17	2.646949	0.15570	Prob > F
C. Total	19	10.385500		<.0001

### Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	3.4243573	0.461201	7.42	<.0001
X3	32.506461	4.806191	6.76	<.0001
X2	0.0000475	0.000029	1.61	0.1259

### Effect Tests

Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
X3	1	1	7.1225240	45.7443	<.0001
X2	1	1	0.4032958	2.5902	0.1259

**Response: MDBH**  
**Explanatory: X3, X1, X2**

**Summary of Fit**

RSquare	0.867207
RSquare Adj	0.842309
Root Mean Square Error	0.29359
Mean of Response	6.265
Observations (or Sum Wgts)	20

**Analysis of Variance**

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	3	9.006381	3.00213	34.8295
Error	16	1.379119	0.08619	Prob > F
C. Total	19	10.385500		<.0001

**Parameter Estimates**

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	3.2357323	0.346656	9.33	<.0001
X3	3.4668135	8.373792	0.41	0.6844
X1	0.0974056	0.025398	3.84	0.0015
X2	-0.000169	0.000061	-2.79	0.0131

**Effect Tests**

Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
X3	1	1	0.0147740	0.1714	0.6844
X1	1	1	1.2678300	14.7089	0.0015
X2	1	1	0.6709668	7.7843	0.0131

**Response: MDBH**  
**Explanatory: X1, X2**

**Summary of Fit**

RSquare	0.865785
RSquare Adj	0.849995
Root Mean Square Error	0.286345
Mean of Response	6.265
Observations (or Sum Wgts)	20

**Analysis of Variance**

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	2	8.991607	4.49580	54.8311
Error	17	1.393893	0.08199	Prob > F
C. Total	19	10.385500		<.0001

**Parameter Estimates**

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	3.2605137	0.333024	9.79	<.0001
X1	0.1069135	0.010578	10.11	<.0001
X2	-0.00019	0.000033	-5.83	<.0001

**Effect Tests**

Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
X1	1	1	8.3755800	102.1490	<.0001
X2	1	1	2.7845615	33.9607	<.0001