James Hahn

STAT1221

Homework #3 MINITAB output

Chapter 6

**1a)**

Correlation: Age1, Dry Weight

Correlations

|  |  |
| --- | --- |
| Pearson correlation | 0.863 |
| P-value | 0.001 |

Correlation: Age1, Dry Weight Log

Correlations

|  |  |
| --- | --- |
| Pearson correlation | 0.999 |
| P-value | 0.000 |

**1c)**

Regression Analysis: Dry Weight versus Age1

The regression equation is  
Dry Weight = - 1.885 + 0.2351 Age1

Model Summary

|  |  |  |
| --- | --- | --- |
| S | R-sq | R-sq(adj) |
| 0.481848 | 74.42% | 71.58% |

Analysis of Variance

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Source | DF | SS | MS | F | P |
| Regression | 1 | 6.07851 | 6.07851 | 26.18 | 0.001 |
| Error | 9 | 2.08960 | 0.23218 |  |  |
| Total | 10 | 8.16811 |  |  |  |

Regression Analysis: Dry Weight Log versus Age1

The regression equation is  
Dry Weight Log = - 2.689 + 0.1959 Age1

Model Summary

|  |  |  |
| --- | --- | --- |
| S | R-sq | R-sq(adj) |
| 0.0280741 | 99.83% | 99.81% |

Analysis of Variance

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Source | DF | SS | MS | F | P |
| Regression | 1 | 4.22106 | 4.22106 | 5355.60 | 0.000 |
| Error | 9 | 0.00709 | 0.00079 |  |  |
| Total | 10 | 4.22815 |  |  |  |

**9a)**

Regression Analysis: TVExp versus Vote

The regression equation is  
TVExp = 1.644 + 0.7733 Vote

Model Summary

|  |  |  |
| --- | --- | --- |
| S | R-sq | R-sq(adj) |
| 2.70060 | 91.01% | 90.51% |

Analysis of Variance

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Source | DF | SS | MS | F | P |
| Regression | 1 | 1329.26 | 1329.26 | 182.26 | 0.000 |
| Error | 18 | 131.28 | 7.29 |  |  |
| Total | 19 | 1460.54 |  |  |  |