Dose= mg of active poison in pesticide.

Weight=0 for lean mice. Weight=1 for fat mice.

If mouse died within 10 minutes after pesticide administration then death=1. Otherwise, death=0.

**Data**

|  |  |  |  |
| --- | --- | --- | --- |
| **Row** | **dose** | **weight** | **death** |
| 1 | 10 | 0 | 0 |
| 2 | 10 | 1 | 0 |
| 3 | 20 | 0 | 0 |
| 4 | 20 | 1 | 1 |
| 5 | 30 | 0 | 0 |
| 6 | 30 | 1 | 0 |
| 7 | 40 | 0 | 0 |
| 8 | 40 | 1 | 1 |
| 9 | 50 | 0 | 1 |
| 10 | 50 | 1 | 0 |
| 11 | 60 | 0 | 1 |
| 12 | 60 | 1 | 1 |
| 13 | 70 | 0 | 1 |
| 14 | 70 | 1 | 1 |
| 15 | 80 | 0 | 1 |
| 16 | 80 | 1 | 1 |
| 17 | 90 | 0 | 1 |
| 18 | 90 | 1 | 1 |

**Regression Equation**

|  |  |  |
| --- | --- | --- |
| P(1) | = | exp(Y')/(1 + exp(Y')) |
| Y' | = | -4,52 + 0,1006 dose + 1,04 weight |

**Coefficients**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Term** | **Coef** | **SE Coef** | **95% CI** | **Z-Value** | **P-Value** | **VIF** |
| Constant | -4,52 | 2,30 | (-9,03; -0,00) | -1,96 | 0,050 |   |
| dose | 0,1006 | 0,0455 | (0,0113; 0,1899) | 2,21 | 0,027 | 1,08 |
| weight | 1,04 | 1,50 | (-1,90; 3,99) | 0,69 | 0,488 | 1,08 |

**Data**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Row** | **dose** | **weight** | **death** | **FITS** |
| 1 | 10 | 0 | 0 | 0,029018 |
| 2 | 10 | 1 | 0 | 0,078026 |
| 3 | 20 | 0 | 0 | 0,075559 |
| 4 | 20 | 1 | 1 | 0,187954 |
| 5 | 30 | 0 | 0 | 0,182700 |
| 6 | 30 | 1 | 0 | 0,387639 |
| 7 | 40 | 0 | 0 | 0,379412 |
| 8 | 40 | 1 | 1 | 0,633872 |
| 9 | 50 | 0 | 1 | 0,625760 |
| 10 | 50 | 1 | 0 | 0,825632 |
| 11 | 60 | 0 | 1 | 0,820565 |
| 12 | 60 | 1 | 1 | 0,928315 |
| 13 | 70 | 0 | 1 | 0,925965 |
| 14 | 70 | 1 | 1 | 0,972541 |
| 15 | 80 | 0 | 1 | 0,971596 |
| 16 | 80 | 1 | 1 | 0,989782 |
| 17 | 90 | 0 | 1 | 0,989424 |
| 18 | 90 | 1 | 1 | 0,996239 |