Name(s) \_\_\_\_\_\_\_\_\_\_KEY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**BA 355: Case 1, Part 2**

**Questions:**

* 1. What are the mean, median and mode for the 2017 point spread?

5.395, 4.5, 3

* 1. What are the mean, median and mode for the 2017 over/under?

44.180, 44, 46.5

$$y=\frac{1}{\left(1+e^{-\left(β0+β1x\right)}\right)}$$

1. the coefficients β0 and β1.

Depends on 9 pick ‘em games. -0.185,0.184

1. the coefficient β1 forcing β0 = 0.

0.162

1. **Print** the graph of the data with the very cool logistic curve.
2. -0.066, 0.158
3. 0.146

|  |  |  |  |
| --- | --- | --- | --- |
| **Spread** | **Wins** | **Games** | **Probability** |
| -26.5 | 1 | 1 | 100% |
| -19.5 | 1 | 1 | 100% |
| -17 | 1 | 1 | 100% |
| -16.5 | 1 | 1 | 100% |
| -16 | 1 | 1 | 100% |
| -15.5 | 5 | 5 | 100% |
| -15 | 2 | 2 | 100% |
| -14.5 | 2 | 2 | 100% |
| -14 | 6 | 6 | 100% |
| -13.5 | 15 | 16 | 94% |
| -13 | 4 | 4 | 100% |
| -12.5 | 8 | 10 | 80% |
| -12 | 7 | 8 | 88% |
| -11.5 | 11 | 11 | 100% |
| -11 | 6 | 8 | 75% |
| -10.5 | 20 | 27 | 74% |
| -10 | 18 | 22 | 82% |
| -9.5 | 19 | 26 | 73% |
| -9 | 17 | 23 | 74% |
| -8.5 | 21 | 30 | 70% |
| -8 | 15 | 18 | 83% |
| -7.5 | 52 | 67 | 78% |
| -7 | 52 | 67 | 78% |
| -6.5 | 73 | 95 | 77% |
| -6 | 34 | 55 | 62% |
| -5.5 | 46 | 60 | 77% |
| -5 | 24 | 40 | 60% |
| -4.5 | 27 | 43 | 63% |
| -4 | 32 | 52 | 62% |
| -3.5 | 102 | 146 | 70% |
| -3 | 94 | 168 | 56% |
| -2.5 | 74 | 132 | 56% |
| -2 | 29 | 64 | 45% |
| -1.5 | 24 | 43 | 56% |
| -1 | 43 | 71 | 61% |
| 0 | 4.5 | 9 | 50% |
|  | 891.5 | 1335 |  |