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- Unit 1: An Introduction to Analytics
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Welcome to Unit 3

# Modeling the Expert: An Introduction to Logistic Regression

Lecture Sequence Quick Questions

### The Framingham Heart Study: Evaluating Risk Factors to Save Lives

Lecture Sequence Quick Questions

Election Forecasting: Predicting the Winner Before any Votes are Cast (Recitation)

#### Assignment 3

Homework due May 10, 2016 at 00:00 UTC

Unit 4: Trees

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## **Quick Question**

(3/3 points)

Suppose the coefficients of a logistic regression model with two independent variables are as follows:

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$$\beta_0 = -1.5, \quad \beta_1 = 3, \quad \beta_2 = -0.5$$

And we have an observation with the following values for the independent variables:

$$x_1 = 1, \quad x_2 = 5$$

What is the value of the Logit for this observation? Recall that the Logit is log(Odds).



-1

What is the value of the Odds for this observation? Note that you can compute  $e^x$ , for some number x, in your R console by typing  $e^x$ . The function  $e^x$ 0 computes the exponential of its argument.

0.3678794

What is the value of P(y = 1) for this observation?

0.2689414

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