✓ **Congratulations! You passed!**

Grade received 87.50%	Latest Submission Grade 87.50%	To pass 80% or higher	**Go to next item**

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1. What technique models the probability of an observation falling into one of two categories, based on one or more independent variables?   **0 / 1 point**

- ◯ Log-odds function
- ◯ Binomial logistic regression
- ⦿ Logistic regression
- ◯ Maximum likelihood estimation

⊗ **Incorrect**
Review the introduction video. ↗

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2. A data professional calculates a logarithm of the odds of a given probability. What are they calculating?   **1 / 1 point**

- ⦿ Logit
- ◯ Recall
- ◯ Likelihood
- ◯ Precision

✓ **Correct**

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3. What technique estimates the beta parameters that increase the likelihood of the model producing observed data?   **1 / 1 point**

- ◯ Accuracy
- ◯ Precision
- ◯ Recall
- ⦿ Maximum likelihood estimation

✓ **Correct**

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4. Following the no extreme outliers assumption, when are outliers detected?   **1 / 1 point**

- ⦿ After the model is fit
- ◯ While the model is being fit
- ◯ Either before or after the model is fit
- ◯ Before the model is fit

✓ **Correct**

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5. What graphical representation demonstrates a classifier's accuracy at predicting the labels for a categorical variable?   **1 / 1 point**

- ◯ Likelihood matrix
- ◯ Logistic graph
- ◯ Logistic matrix
- ⦿ Confusion matrix

✓ **Correct**

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6. A data professional calculates precision in logistic regression results. They have 101 true positives, 63 true negatives, 4 false positives, and 2 false negatives. What is the calculation for precision?   **1 / 1 point**

- ⦿ $101 / (101 + 4)$
- ◯ $101 / (63 + 2)$
- ◯ $(63 + 4) / 101$

○ (63 + 4) / 101

○ (101 + 2) / 4

✓ **Correct**

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7. A data professional calculates accuracy in logistic regression results. They have 82 true positives, 75 true negatives, and 202 total predictions. What is the calculation for accuracy?

1 / 1 point

○ 82 / (202 - 75)

◉ (82 + 75) / 202

○ 202 / (82 + 75)

○ (202 - 82) / 75

✓ **Correct**

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8. A data professional calculates recall in logistic regression results. They have 145 true positives, 128 true negatives, 4 false positives, and 2 false negatives. What is the calculation for recall?

1 / 1 point

◉ 145 / (145 + 2)

○ (145 + 128) / (4 + 2)

○ (128 + 2) / 128

○ (4 - 2) / 145

✓ **Correct**

○ (63 + 4) / 101

○ (101 + 2) / 4