

MATH 241, Spring 2016

Quiz 2 - Review and practice

Format of Quiz:

1. In-class Quiz Friday, November 18, 2016.
2. Students are expected to **work independently** and abide by the college honor code.
3. Under no circumstances should students discuss the content of this exam with anyone except the course instructor.
4. This is a closed book and closed notes quiz - books and notes are not permitted.
5. Cell phones are not permitted. **Calculators are permitted.**
6. The quiz will be composed of multiple choice and short answer questions.

Material covered: The content of the quiz will include the material in Lecture Notes 4, 5, and 6.

Students are expected to:

1. Interpret a logistic regression model and estimate the probability and the log odds of an event occurring based on the logistic model;
2. Apply Bayes' theorem to find a conditional probability;
3. Interpret and apply an LDA decision boundary;
4. Construct a confusion matrix and calculate the corresponding sensitivity, specificity and false positive rate;
5. Understand the relationship between sensitivity (true positive rate) and false positive rate as described by the ROC curve;
6. Create and interpret visual displays of a classification or regression tree.