

Exam 01 Review

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Announcements

- HW 04 due Thursday at 11:59p
- Thursday's Lab: Exam help hours

Exam I Outline

- Short answer questions
- Permitted to bring one sheet of handwritten notes (front and back)
 - Must turn in notes with exam. Put your name at the top of your notes.
 - You will not be permitted to use your notes if they are not handwritten
- Calculator **not** permitted on exam
- Please use blue or black ink pen!

Topics

- Regression Basics
 - Interpreting coefficients
 - Inference for regression
 - Predicted values and the appropriate interval
 - Regression assumptions
- ANOVA to compare group means
- ANOVA for regression

Topics

- Transformations on the predictor or response variables
 - Determining if transformation is required
 - Interpreting coefficients on transformed and original scales
 - Calculating predicted values on transformed and original scales
- R^2 versus Adjusted R^2
- Special predictors: indicator variables and interaction terms

Topics

- Interaction terms
- Nested F Test
- High leverage, outliers, and influential points
 - Basic ideas - no calculations
- Multicollinearity
 - Basic ideas - no calculations

Questions?

Practice

Cars analysis

- Sit with your lab group.
- Copy the **Exam 01 Review** project on RStudio Cloud to type your responses in the R Markdown file.
- You can also find the application exercise on the course schedule.