

**MATH 567 - Chapter 7 Questions**  
**Winter quarter 2016**

1.  $R^2$  is
  - A. The percentage of variance in the predictor accounted for by the outcome variable.
  - B. The proportion of variance in the outcome accounted for by the predictor variable or variables.
  - C. The proportion of variance in the predictor accounted for by the outcome variable.
  - D. The percentage of variance in the outcome accounted for by the predictor variable or variables.
2. Which of the following statements about the  $t$ -statistic in regression is not true?
  - A. The  $t$ -statistic tests whether the regression coefficient,  $b$ , is equal to 0.
  - B. The  $t$ -statistic provides some idea of how well a predictor predicts the outcome variable.
  - C. The  $t$ -statistic can be used to see whether a predictor variables makes a statistically significant contribution to the regression model.
  - D. The  $t$ -statistic is equal to the regression coefficient divided by its standard deviation.
3. Which of the following statements about outliers is not true?
  - A. Outliers are values very different from the rest of the data.
  - B. Outliers have an effect on the mean.
  - C. Outliers have an effect on regression parameters.
  - D. Outliers are influential cases.
4. For which regression assumption does the Durbin–Watson statistic test?
  - A. Linearity.
  - B. Independence of errors.
  - C. Homoscedasticity.
  - D. Multicollinearity.
5. Figure 1 shows:
  - A. Non-linearity.
  - B. Heteroscedasticity and non-linearity.
  - C. Regression assumptions that have been met.
  - D. Heterscedasticity

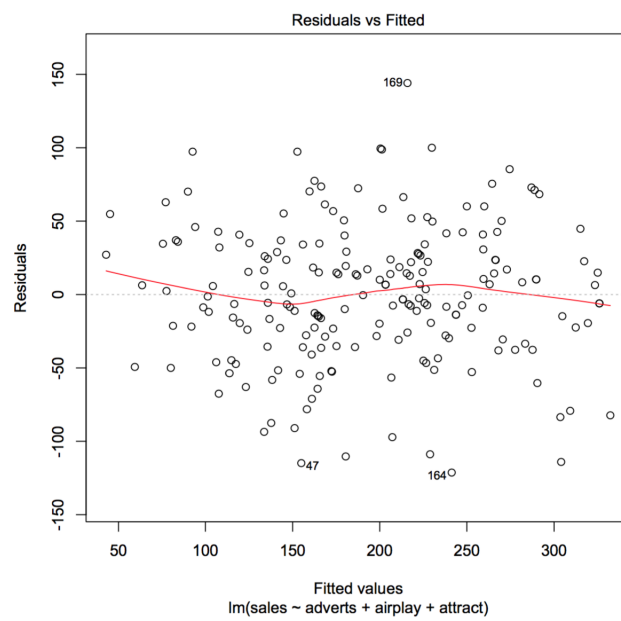


Figure 1: Residual vs Fitted values