Week 1 - Check Your Understanding

1. In simple linear regression, both the response and the predictor are usually assumed to be random variables.
   * 1. True
   * \*b. False
2. The variance of the response and the error are both assumed to be constant (does not depend on the predictors) and equal to .
   * \*a. True
     1. False
3. The least squared method is the only way to determine the parameters and
   * 1. True
   * \*b. False
4. In the least square method, and minimizes
   * \*a. The sum of all square errors
     1. The sum of all absolute errors.
5. The total sum of squares is always greater than the Regression sum squares.
   * \*a. True
     1. False
6. The coefficient of determination can not be greater than 1.
   * \*a. True
     1. False
7. The hypothesis that there is no linear relationship between the response and the predictor is equivalent to
   * \*a.
8. We can use both the t-test and F-test to test for vs.
   * \*a. True
     1. False