

Week 3 - Check Your Understanding

1. Multiple linear model cannot incorporate a categorical response.
*a. True
b. False
2. Multiple linear regression is a special case of generalized linear model with a link function being the identity function.
*a. True
b. False
3. A normal distribution is a special case of exponential distribution.
*a. True
b. False
4. The least squares method can be applied to solve for optimal estimations of model parameters for any generalized linear model.
a. True *b. False
5. The maximum likelihood method can be used to solve for parameter estimations in linear regression.
*a. True
b. False
6. The sum squares decomposition of $TSS = RSS + Reg\ SS$ also holds in generalized linear model.
a. True *b. False
7. We can use AIC and BIC to decide how many predictors to include in the generalized linear model.
*a. True
b. False
8. In logistic regression, the response mean can be interpreted as the probability that the response equals one or zero.
*a. True
b. False
9. One wants to model a counting response, she/he should use
a. Probit Regression *b. Poisson Regression