

## 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