Week 3 - Check Your Understanding

1. Multiple linear model cannot incorporate a categorical response.

* \*a. True
  1. False

1. Multiple linear regression is a special case of generalized linear model with a link function being the identity function.

* \*a. True
  1. False

1. A normal distribution is a special case of exponential distribution.

* \*a. True
  1. False

1. The least squares method can be applied to solve for optimal estimations of model parameters for any generalized linear model.
   1. True

* \*b. False

1. The maximum likelihood method can be used to solve for parameter estimations in linear regression.

* \*a. True
  1. False

1. The sum squares decomposition of TSS = RSS + Reg SS also holds in generalized linear model.
   1. True

* \*b. False

1. We can use AIC and BIC to decide how many predictors to include in the generalized linear model.

* \*a. True
  1. False

1. In logistic regression, the response mean can be interpreted as the probability that the response equals one or zero.

* \*a. True
  1. False

1. One wants to model a counting response, she/he should use
   1. Probit Regression

* \*b. Poisson Regression