add\_model\_no\_embarked = glm(Survived ~ (. - Embarked)^2, data = ptitanic\_trn, family = binomial, maxit = 50)

add\_model\_two\_way = glm(Survived ~ .^2, data = ptitanic\_trn, family = binomial, maxit = 50)

add\_model = glm(Survived ~ . -Embarked, data = ptitanic\_trn, family = binomial, maxit = 50)

#n = length(resid(add\_model\_no\_embarked))

#aic = step(add\_model\_two\_way, direction = "backward", k = log(n))

aic\_pick = glm(Survived ~ Pclass + Sex + Age + Parch + Fare + Pclass:Parch +

Sex:Parch + Sex:Fare + Parch:Fare, data = ptitanic\_trn, family = binomial, maxit = 50)

aic\_pick2 = glm(Survived ~ Pclass + Sex + Age + Parch + Fare + Pclass:Parch +

Sex:Age + Parch:Fare, data = ptitanic\_trn, family = binomial, maxit = 50)

Youl3 = glm(formula = Survived ~ Pclass + Sex + Age + SibSp + Embarked +

Pclass:Sex + Age:SibSp + Sex:Embarked, family = "binomial",

data = ptitanic\_trn)