Week 6 - Check Your Understanding

1. All the trees in a random forest are trained on the same original dataset.
   1. True

* \*b. False

1. To decide the best variable to split for a tree in a random forest, one would consider all the possible predictors to decide the best.
   1. True

* \*b. False

1. In random forest, one can estimate the test error without performing cross validation or other validation set approach.

* \*a. True
  1. False

1. Random forest usually improve the accuracy over prediction using a single tree.

* \*a. True
  1. False

1. Bagging method can be applied to linear models.

* \*a. True
  1. False

1. Bagging models will reduce the variance of the model comparing to a single model

* \*a. True
  1. False

1. Bagging models will be easier to interpret than a single model
   1. True

* \*b. False

1. The number of variables/predictors considered at each split to decide the best split in a random forest is where is the total number of predictors.

* \*a. True
  1. False

1. One can increase the diversify of a random forest by increasing the number of variables/predictors considered at each split to decide the best split in a random forest

* \*a. True
  1. False