8.4 Review Questions

8.4.R1

1/1 point (graded)
Suppose we produce ten bootstrap samples from a data set containing red and green classes. We then apply a classification tree to each bootstrap sample and, for a specific value of X, produce 10 estimates of P(Class is Red|X):

$$0.1, 0.15, 0.2, 0.2, 0.55, 0.6, 0.6, 0.65, 0.7, \text{ and } 0.75$$

There are two common ways to combine these results together into a single class prediction. One is the majority vote approach discussed in the notes. The second approach is to classify based on the average probability.

What is the final classification under the majority vote method?:

red   ✔ **Answer:** red

Explanation
6 of the 10 probabilities are greater than 1/2, so the majority vote method will select red.

Submit

ⓘ   Answers are displayed within the problem

8.4.R2

1/1 point (graded)
What is the final classification under the average probability method?:

green   ✔ **Answer:** green

Explanation

The average of the probabilities is 0.45, so the average probability method will select green.

Submit

ⓘ   Answers are displayed within the problem