MITx: 15.071x The Analytics Edge

Help

Courseware (/courses/MITx/15.071x/1T2014/courseware)

Course Info (/courses/MITx/15.071x/1T2014/info)

Discussion (/courses/MITx/15.071x/1T2014/discussion/forum)

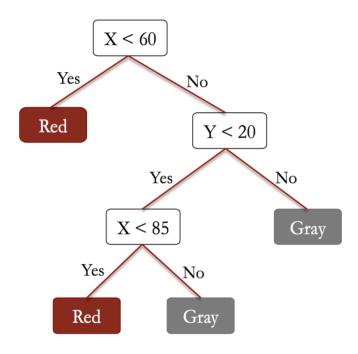
Progress (/courses/MITx/15.071x/1T2014/progress)

/llabus (/courses/MITx/15.071x/1T2014/4264e68418f34d839cf0b33a5da644b2/)

thedule (/courses/MITx/15.071x/1T2014/2891f8bf120945b9aa12e6601739c3e6/)

## QUICK QUESTION 2 (2/2 points)

Suppose that you have the following CART tree:



How many splits are in this tree?

3

3

Answer: 3



For which data observations should we predict "Red", according to this tree?

- If X is less than 60, and Y is any value.
- - If X is greater than or equal to 60, and Y is greater than or equal to 20.
  - ☐ If X is greater than or equal to 85, and Y is less than 20.

## **EXPLANATION**

This tree has three splits. The first split says to predict "Red" if X is less than 60, regardless of the value of Y. Otherwise, we move to the second split. The second split says to check the value of Y - if it is greater than or equal to 20, predict "Gray". Otherwise, we move to the third split. This split checks the value of X again. If X is less than 85 (and greater than or equal to 60 by the first split) and Y is less than 20, then we predict "Red". Otherwise, we predict "Gray".

Final Check

Hide Answer



EdX is a non-profit created by founding partners Harvard and MIT whose mission is to bring the best of higher education to students of all ages anywhere in the world, wherever there is Internet access. EdX's free online MOOCs are interactive and subjects include computer science, public health, and artificial intelligence.



(http://www.meetup.com/edX-Global-Community/)



(http://www.facebook.com/EdxOnline)



(https://twitter.com/edXOnline)



(https://plus.google.com/108235383044095082)



(http://youtube.com/user/edxonline) © 2014 edX, some rights reserved.

Terms of Service and Honor Code - Privacy Policy (https://www.edx.org/edx-privacy-policy)