

[Courseware \(/courses/MITx/15.071x/1T2014/courseware\)](/courses/MITx/15.071x/1T2014/courseware)[Course Info \(/courses/MITx/15.071x/1T2014/info\)](/courses/MITx/15.071x/1T2014/info)[Discussion \(/courses/MITx/15.071x/1T2014/discussion/forum\)](/courses/MITx/15.071x/1T2014/discussion/forum)[Progress \(/courses/MITx/15.071x/1T2014/progress\)](/courses/MITx/15.071x/1T2014/progress)[yllabus \(/courses/MITx/15.071x/1T2014/4264e68418f34d839cf0b33a5da644b2/\)](/courses/MITx/15.071x/1T2014/4264e68418f34d839cf0b33a5da644b2/)[Schedule \(/courses/MITx/15.071x/1T2014/2891f8bf120945b9aa12e6601739c3e6/\)](/courses/MITx/15.071x/1T2014/2891f8bf120945b9aa12e6601739c3e6/)

Help

This question asks about the following two confusion matrices:

Confusion Matrix #1:

	Predicted = 0	Predicted = 1
Actual = 0	15	10
Actual = 1	5	20

Confusion Matrix #2:

	Predicted = 0	Predicted = 1
Actual = 0	20	5
Actual = 1	10	15

QUICK QUESTION 5.1 (2/2 points)

What is the sensitivity of Confusion Matrix #1?

Answer: 0.8

EXPLANATION

The sensitivity of a confusion matrix is the true positives, divided by the true positives plus the false negatives. In this case, it is $20/(20+5) = 0.8$

What is the specificity of Confusion Matrix #1?

Answer: 0.6

EXPLANATION



The specificity of a confusion matrix is the true negatives, divided by the true negatives plus the false positives. In this case, it is $15/(15+10) = 0.6$

[Check](#)[Save](#)[Hide Answer](#)

You have used 1 of 5 submissions

QUICK QUESTION 5.2 (1 point possible)

To go from Confusion Matrix #1 to Confusion Matrix #2, did we increase or decrease the threshold value?

- ☐ We increased the threshold value. 
- ☒ We decreased the threshold value. 

EXPLANATION

We predict the outcome 1 less often in Confusion Matrix #2. This means we must have increased the threshold.

[Hide Answer](#)

You have used 1 of 1 submissions



About (<https://www.edx.org/about-us>) Jobs (<https://www.edx.org/jobs>)
Press (<https://www.edx.org/press>) FAQ (<https://www.edx.org/student-faq>)
Contact (<https://www.edx.org/contact>)



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 \(https://www.edx.org/edx-privacy-policy\)](https://www.edx.org/edx-privacy-policy)