

### 3.4. Number of Jurors to Convict

Federal courts and most states in the US require that all 12 jurors agree on guilt before a defendant can be convicted. But in Oregon (and Louisiana until 2018), only 10 of the 12 jurors are needed to convict for noncapital cases.[1] At this writing the Oregon legislature will reconsider this policy in 2019.{Wilson, 2018 #1610}. Meanwhile, the material in Chapter 3 may help clarify some of the issues.<sup>1</sup>

Simplify this problem by ignoring mistrials and considering only two possible verdicts: guilty and not guilty. In this analogy, a truly guilty defendant is like a patient with the disease, and an innocent defendant is like a patient without the disease, and a conviction by the jury is like a positive test.

- a. If you continue with the diagnostic test analogy, what would you call the *proportion of innocent defendants who are acquitted*?
  
- b. If your only goal were to maximize "sensitivity," would you tend to favor the Oregon approach? Why or why not?
  
- c. A key question for this debate is: what is the trade-off between "true positives" and "false positives"? That is, how much do you increase your chance of convicting someone who is innocent in order to convict more people who are guilty? This trade-off can be visualized with ROC curves. Draw two hypothetical ROC curves<sup>2</sup> for this problem. **Each curve should have the points labeled "10" and "12" on it for the number of jurors needed to convict.** Make the first ROC curve one that would lead you unequivocally to support convictions with only 10 jurors voting guilty, and the other ROC curve one that would lead you unequivocally to oppose such split convictions. (Label the curves "Support" and "Oppose.") Explain your answer.
  
- d) One reason why rational people might disagree on whether to support nonunanimous convictions is that their estimates of the slope of the ROC curve between the 10 and 12 juror points differ. Suppose two people agree completely on that. What are at least two additional reasons why they might still disagree on whether to change the law?

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<sup>1</sup>We must admit that material in Chapter 3 won't help with the fact that the intention of the Louisiana law was overtly racist, which would be a reason to change the law even if one were agnostic about the shape of the ROC curves to be drawn later in the problem.

<sup>2</sup>Hint: ROC "curves" need not be curved! In this case the ROC curves should be made up of straight line segments.

## References

1. Swenson D. Understanding Louisiana's nonunanimous jury law findings: Interactive, animated slideshow. The New Orleans Advocate [Internet]. April 1, 2018. Available from: [https://www.theadvocate.com/new\\_orleans/news/courts/article\\_159e7f5a-3459-11e8-b935-e7a91fc85713.html](https://www.theadvocate.com/new_orleans/news/courts/article_159e7f5a-3459-11e8-b935-e7a91fc85713.html). Accessed October 5, 2018.