I have italicized the portions of these answers that specifically improve the answer from a “B” to an “A”.

1. It seems clear that Scheme X is the favorite scheme of the class. By how much more do you think the class favored it than the other schemes, a great deal or only a little? Cite specific evidence that backs up your opinion.

- I think that Scheme X is the favorite scheme by a lot because it wins in every election. It almost has half the votes in plurality, which is difficult to achieve because there are so many options to choose from. It defeats every option in the Condorcet Method. It isn’t far away from 100% of the approval voting. And it has the majority vote in the plurality runoff. The only election which looks like it could be easily altered is the Borda Count.
- X was favored by a good amount because it won throughout all the voting methods with a decent difference (at least 9%) between it and the next option. The approval vote and the Borda Scores were the closest but the approval vote allows for multiple choices which doesn’t show a preference between X and Y.

2. We noted in class that the schemes X, Y, and B all seemed to do the best, and we theorized that this was due to the fact that they share the 15% Final Exam. How do you think the class felt about the 24% Final Exam and 30% Final Exam? How important do you see the Final Exam Percentage being in people’s votes? Use specific results that demonstrate your answer.

- The class didn’t want that much weight on the final exam, and probably wanted exam weight more evenly distributed. Final exam percentage seems to be extremely important in people’s votes, as displayed by the approval votes (X, Y, and B had the same breakdown (final-wise) and had approval rates of above 70%, whereas after those the next closest approval was 30%).
- The final exam was hugely important. This is shown in the approval voting. The first three schemes with 15% all had over 70% approval. A and Z with 24% had around 30% and then C had less than 10%.

3. Suppose that the Math Department ruled that 15% was too low for a final exam. Given our election, what grading scheme would you recommend? What evidence supports your view? What evidence detracts from your argument, and why does it not change your opinion?

- When you look at A,C, and Z, Z would probably be the class winner for grading scale. When you look at the plurality voting first choices, Z got 14% which seems low but A and C both got 0%. There is one place, approval voting, where A is higher than Z but only by 2%. Approval voting is harder to judge because you could approve of all the options, that is why we find it more important to notice what happened with the plurality vote.
- Through our elections Z would win because it came out in front of A 6 out of 7 times. However, if we held an election with just A, Z, and C we think A would win because A is more similar to X because homework, quizzes, and group projects are the same. Also, A won over Z in approval voting.
4. Which of these voting methods gives results that you feel best represent “the will of the class”? What about the data do you find so convincing? Do you think that this voting method is “the best” or that it just happened to work out well in our particular setting? Why?

- We feel that the Condorcet Method and the plurality runoff best represent the will of the class because they both end with a one-on-one contest which is similar to majority rule. According to May’s Theorem majority rule treats candidates/voters equally and is monotone so it is always a good option. At the same time, both of them take into consideration the other voters. These voting methods aren’t always the best, but they do work out in this setting. For example, Condorcet isn’t the best in situations where a winner does not exist (Condorcet Paradox) but in this situation there IS a winner (X) so it works out.

- We think plurality and approval voting are the best methods. Plurality is good because it shows the “majority” winner with 48% when everyone had 1 vote. Approval is good because it shows there preferences of the voters. You can see a huge dropoff between X, Y, and B (15% final exam) and A, Z, and C (more than 15% finals). This shows what the class really prefers. I think these voting methods are good for any setting because they show the most popular as well as preferences/what is seen as acceptable.

5. Last class, David mentioned that a group of Urbana citizens is petitioning to change the voting system in Urbana (for city-level officials) from Plurality Voting to the Hare System. Do you think this is a good idea? Why or why not?

- There seem to be pros and cons for the two voting methods and it is very hard for us to decide. One con for the Hare system is that there is a chance for a tie. Also, there seem to be a lot of chances for the Hare system to be manipulated. The plurality voting method just doesn’t seem to be enough, as seen in the Gore v. Bush election, after other candidates have lost, should their vote go towards someone else? Therefore, we think a compromise between the two would be the plurality runoff method with the majority vote between the top two candidates.

- With people’s current knowledge of voting systems plurality is probably the better choice because the average person wouldn’t realize how important their second choice would be and most people don’t know more than 1 or 2 candidates so having only one choice would stop (unintentional) manipulation of votes.

- Yes, it is a good idea! Since the Hare System has multiple rounds, it could be possible for a third party candidate to get farther, if not win outright. The Hare System also forces a candidate to get a majority vote.