Production:

In the course of grading homework assignments Professor Goodmeyer became concerned that Pamela, a Bryn Mawr student, had used the solution manual to complete her calculus homework. Professor Goodmeyer brought this concern to her attention at which point Pamela denied using the solution manual. Several days later Professor Goodmeyer contacted Pamela again and informed her that the matter needed to be brought to Honor Council’s attention. Pamela contacted the Chair of Honor Council. Honor Council reached consensus that a trial was necessary.

Fact Finding:

The jury met with Professor Goodmeyer and Pamela to hear their accounts of what had happened. Pamela, Pamela’s Dean (support person), Pamela’s friend An-Mei, and Professor Goodmeyer all attended the meeting.

Professor Goodmeyer began by saying that he was almost finished grading Pamela’s calculus assignment when he noticed the use of nonstandard notation in her last two solutions. He then looked up the problems in the solution manual and discovered that Pamela’s last two solutions were “virtually identical” to the solutions in the manual. Professor Goodmeyer stressed that Pamela’s solutions, each a third of a page long, were line by line replicas of the solution manual, down to the exact notation and indentation. Professor Goodmeyer was also concerned by the terminology used in Pamela’s homework. Pamela had used both nonstandard terminology and standard terms that had not been covered in class, but which were in the solution manual. The mathematical terms in question are “whoozit” and “hatzit.” Professor Goodmeyer also questioned the method and terminology used in breaking problem 7-23 up into two equations, labelling them with a choice of variables, “v1” and “v2”, which did not appear in the book, but were in the solution manual.

Finally Professor Goodmeyer said that students did have access to the solutions in two ways: 1) the day homework was turned in, the solutions were put on reserve in the library. Pamela’s homework was turned in a class day late. 2) He had distributed copies to his students for the course two years ago. Another concern was that Pamela had skipped doing two problems (7-21 and 7-23 c, d) that were not included in the copies of the solutions he had given out two years ago. Given the striking similarities between Pamela’s assignment and the solution manual, and the fact that there was access to the solutions, Professor Goodmeyer was unable to say that the assignment was completely Pamela’s work.

When Professor Goodmeyer brought his concern to Pamela he asked her to define one of the terms that she had used in her solution, whoozit, and she was unable to define it. Several days later they talked again and he informed her that the matter must be brought to Honor Council’s attention. When she tried to question him about this he said that it was out of his hands and that they shouldn’t discuss the matter outside of Honor Council. Pamela then contacted the Chair of Honor Council.

Next Pamela spoke. A linear description of Pamela’s testimony will be given first and then a summary of what the jury saw as her main points will follow.

Pamela began by explaining that Professor Goodmeyer had confronted her in an accusing way after an exam by saying that it seemed to him that she had copied 2 solutions from the solution manual. Pamela denied that she had copied. She told Professor Goodmeyer that she couldn’t do 7-23 c and d at the time but that after giving it some thought she had realized how to do the problems. She also informed Professor Goodmeyer that she had
received help on her homework from a friend at Swarthmore, Horatio, who had aided her in seeing the relationship between two seemingly opposite problems. This friend was in Timbuktu at the time of the trial, but Pamela said that he would return in a few days and she gave the jury his phone number. Next she said that Professor Goodmeyer had previously used the word whoozit in class. Pamela used Professor Goodmeyer's terms and her friend's help to complete her homework. Also during the course of this first meeting Pamela asserted that Professor Goodmeyer had asked her to define a "weirdzit," not a "whoozit". She was unable to define the term when Professor Goodmeyer confronted her but she remembered it later and tried to contact him twice concerning this issue.

According to Pamela, at the second meeting she had wanted to prove to Professor Goodmeyer that she could solve the problem but he wouldn't let her. Her friend, An-Mei, had also come to this meeting to say that Pamela had not cheated but Professor Goodmeyer wouldn't listen to her; he just said that it was out of his hands. Pamela was upset that "he never asked me to do the problem." She cited him as saying, "Look, I'm having a hard time believing your story." She wished that he hadn't spoken to her like that.

Next Pamela argued that she had no motive to cheat and that she was not the type of person to cheat. She pointed out that we were discussing 2 homework problems on one assignment and that all of the homeworks combined only amounted to 15% of the grade, and that these assignments were graded on a plus/minus system. Therefore cheating would not have significantly helped her grade. Pamela refuted Professor Goodmeyer's claim that she could have been stressed and cheated under pressure by saying that she was not the type of person to cheat. She asked the jury and Professor Goodmeyer why she would take the time to write out each step in detail on other problems if she were stressed and pressured into cheating on the last two. Pamela said that she would rather fail then cheat, that it had taken a lot for her to get here, a lot for her family to get her here, and that she would never do something like this.

Finally Pamela said that there weren't a zillion ways to get an answer to a calculus problem and that everyone knows that v1 and v2 are common variables to use. Pamela stated that she used example 7.9 in the textbook, which solved the problem in a similar manner as the solution manual, to answer problem 7-23. She also said that the terms "whatzit" and "whatzoing-whoozdinger" are used in two pages of the text.

The jury saw the main points of her statement as follows: 1) the last 2 problems in Pamela's homework were solved by receiving help from a friend and by using the textbook, 2) Pamela was very upset about the way Professor Goodmeyer confronted her, 3) the assignment was so small that she had no motive to cheat, 4) stress did not motivate her to cheat, and 5) she was not the type of person to cheat.

Next the jury received a short calculus lesson from the slightly reluctant Professor Goodmeyer.

Then Pamela's friend, An-Mei, spoke. An-Mei stated that she and Pamela had been friends for 2 years. An-Mei said that they had spent all Thursday night together studying and helping each other with their homework. She reiterated that Pamela had called Horatio, her friend from Swarthmore, for help. She then said that they had gone to bed around 4:30 AM. Next An-Mei said that to the best of her knowledge Pamela didn't have a solution manual. Finally she said that Pamela had woken up early Friday morning to give her homework to a friend so that he could turn it in for her.

Finally the jury asked questions. During this process Pamela restated that she had used the v1 and v2 variables to separate problem 7-23 out into two equations because that method made more sense to her, and that she had used example 7.9 from the text to do problem 7-23 a
and b. She then said that Horatio, her friend from Swarthmore, helped her to formulate the idea about the whoozit for problem 7-25. One juror questioned her as to why she didn't ask for help on problems 7-21 and 7-23 c and d, which she had skipped. Pamela answered that there was not enough time. She also stated that problems c and d were harder because after following the formula there was an additional step which a and b did not have. Another juror asked Professor Goodmeyer if it was appropriate for students to receive outside help on their homework. He replied that he encouraged collaboration but that once the student began their work they had to complete it on their own. Pamela then said that she discussed the homework with Horatio in terms of generalities. When asked why she stayed up until 4 in the morning if she wasn't stressed, Pamela said that she was helping An-Mei study, they did this all the time, and that the homework was not important enough to stress over. Professor Goodmeyer repeated that he could not come up with a rational reason for Pamela to cheat but that he could imagine a student being in a tight spot. Another juror asked why she rounded one answer and not the rest of them. Pamela answered that the context of the problem suggested that one should round the answer because of the units in which the answer was to be expressed. Finally Professor Goodmeyer reiterated that 7-21 and 7-23 c, d, the problems that Pamela skipped, were not in the solution set that he had distributed two years ago, although they were in the solutions on reserve in the library.

Jury Deliberations:

The jury began by breaking up into pairs and looking through copies of the packet that Pamela had prepared. This packet consisted of her homework, the solution set that was distributed last year, a letter of support from her boss, and pages from the textbook that she had used to complete her work. When the jury came together most members were very suspicious of a violation given the striking similarities between the solution manual and Pamela's homework. Many felt that they could account for each individual similarity by looking at Pamela's explanation of how the work was completed, but that when taken as a whole it seemed improbable that she would consistently come up with answers that looked exactly like the solution set.

When the jury reconvened the next day most jurors suspected that Pamela had copied the last 2 problems of her homework but they were still unsure. Many jurors felt that they had a definite suspicion of violation but they wanted more proof. A couple jurors found the defensive and inconsistent nature of her presentation to be incriminating. Another juror pointed out that that Pamela's defensive nature was explainable whether she was innocent or guilty, given that she was being accused of violating the academic Honor Code. The Chair reiterated that the main question that the jury was trying to answer was “Did Pamela copy?”

The jury then began a detailed assessment of Pamela's homework, the solution manual, and the excerpts from the text. The first six problems in the set, the jury agreed, were all clearly Pamela's own work. This left the jury with an absence of 7-21, a replica of 7-23 a and b, an absence of 7-23 c and d, and another replica of 7-25. One juror pointed out that there was a definite conceptual break in the homework set between the first six problems and 7-21 through the end. The first six were all very straightforward (ie. plug the numbers in the formula) problems. From 7-21 on the problems were more conceptual.

The jury then went on to look for a pattern in her work, some difference that would tell the jury if this was Pamela's work or not. The jury analyzed the way she set up her problems, the breaks in her equations, her use of significant digits etc... Eventually the jury concluded that this line of reasoning was ineffective and that they had to focus on the 2 problems at hand, 7-23 and 7-25. The jury then bemoaned the fact that they were working with such a small
sample of work. Many jurors felt that if there was just one more problem that was the same they would have no trouble saying that Pamela had cheated, and if there was one less then they could say that there wasn't enough evidence, but that as it stood they just didn't know.

The jury had many questions that began "why didn't she...." For instance, why didn't she do 7-21 (it seemed easy to the jurors, even those with no mathematical training in this area), why couldn't she do c and d (which seemed very similar to a and b, despite the added step), why didn't she put down something for partial credit, why did she leave space for one skipped problem and not the other, etc. This line of questioning was soon dropped because the jury realized that they could not base their judgement on what they thought Pamela ought to have done.

The jury also considered the possible violation of not following Professor Goodmeyer's instructions to work from start to finish on a homework assignment without receiving outside help. (Pamela said that she had called her friend from Swarthmore while she was working on the assignment.) The jury decided that whether those actions might constitute a violation was irrelevant to the case at hand. One juror argued that Pamela had lied to the jury by first saying that Horatio had specifically helped her with 7-25, but then when questioned about the integrity of receiving this aid Pamela said that they had only talked in terms of generalities.

The jury continued the process of looking at the evidence closely and carefully. At one point about half of jurors felt that a violation had occurred because the similarities between the homework and the solution set were so compelling, but the other half were still unsure because they could think of ways to explain the similarity. Eventually the jury concluded that one could come up with logical explanations for both sides of the argument.

A summary of both arguments is as follows:

**Evidence that Pamela Cheated:**

A) The homework and the solution set match exactly for problems 7-23 a, b and 7-25 in the following ways: 1) number of problems completed, 2) wording, including the nonstandard terms, choice of variable names, and three short lines of terse explanation in English (except for one word which is abbreviated in Pamela's work but written out in the solution set), 3) indentation, and 4) layout of the calculations.

B) There is a break in the pattern of her work which suggests that the work might not be her own.

C) The contradiction in her explanation of the phone call to Horatio (A discussion that used to contain specific terms became a discussion of generalities) indicates that she lied to the jury, which calls her honesty into question.

D) Pamela's inability to answer Professor Goodmeyer's question as to the meaning of the term "whoozit" suggests that she copied the problem instead of going through the process of figuring out what a whoozit was from the book and through her conversation with Horatio. (The jury concluded that Professor Goodmeyer probably asked about a whoozit despite Pamela's claims to the contrary because it would make more sense for him to ask about something that had appeared in her homework. Furthermore, the jury could find no signs that a weirdzit was even a real term.)

E) The absence of 7-21 and 7-23 c and d is suspicious because they seem to be relatively simple problems that she should have been able to figure out if she really knew what she was doing. Instead she didn't do them, and they are the exact same problems that are missing from the solution set.
Possible Explanations for The Evidence:

A) The similarity is the hardest evidence to explain, but it could be that 1) The break in ability to complete the assignment corresponds with an ideological break in the problems themselves. 2) The terms whoozit and whatzit could have been come from her friend (whoozit) and the text (whatzit and whatzoing-whoozdinger). 3) It could be coincidence that the indentation, layout, and wording are exactly the same; it was a small sample of work.

B) Again, the break in her work (from being complete, thorough, and accurate to skipping problems and changing her layout style) corresponds with an ideological break in the problem set.

C) The confusion in her story could be due to stress from the trial, and the fact that the conversation with Horatio took place late at night a week before the trial.

D) It is possible that she wouldn't remember the term “whoozit” because she didn't need it for the test and therefore forgot it.

E) Since Pamela was doing her homework in the late night/early morning hours, it is highly probable that she blanked out on problems 7-21 and 7-23 c and d. The jury agreed that they had all done stupid things like failing to complete easy problems and leaving things blank.

After reviewing these arguments the jury concluded that they could dismiss arguments B through E because they tended to involve subjective interpretation, and the possible explanations seemed legitimate. This left the jury with reason A, the similarities between Pamela's homework and the solution manual. Since the jury did have possible explanations for the similarities, the next question they had to answer was did the two problems constitute proof beyond a reasonable doubt that Pamela had copied her homework?

Before answering this question the jury discussed the concepts of proof positive vs. proof beyond a reasonable doubt. Two jurors wanted more evidence so that they would have proof positive. They didn’t want to find Pamela in violation of the code unless they were absolutely sure about her guilt. The Chair pointed out that: 1) the community has clearly stated in plenary that juries should operate under the guidelines of proof beyond a reasonable doubt, 2) a system that requires proof positive is unworkable because people do cheat and then lie about it. Juries can’t let that go. 3) Proof positive is unattainable; there will always be a chance that the confronted party isn’t lying. The Chair then cited the Brenda Abstract as an example of a situation where the jury wanted absolute proof that someone had cheated. This led the jury to decide that Brenda was not in violation, a decision that outraged the entire community, faculty, students, and administration alike. The Chair also stated that there were no set guidelines for proof beyond a reasonable doubt, so each member would have to draw that line individually.

The two jurors felt that it was much worse to wrongly accuse someone who was innocent than to let someone go who was guilty. They both felt that Pamela had probably cheated on her homework but weren’t sure enough to find her in violation. They still wanted more evidence. A third juror questioned the two as to what motivated their doubts: was it fear of finding Pamela in violation and potentially screwing up her life, or was it a real doubt about her guilt? If it was the former the third juror didn’t think the two should make their decisions based on a fear of the outcome, but if their doubts were motivated by actual questions as to Pamela's innocence then these questions needed to be addressed through further discussion. The two jurors asserted that their feelings were not motivated by fear, and while they both felt that the jury had proof beyond a reasonable doubt they still wanted proof positive. The other ten jurors, while many still had some doubts, felt that they had proof beyond a reasonable doubt. At this point the jury could have reached consensus with two
jurors standing outside but the Chair decided to keep trying to get full consensus because he felt that it was possible to resolve the ideological differences, and that it would be better to have a united jury.

After a long break the jury reconvened. Ten of the twelve jurors still felt that they had proof beyond a reasonable doubt. Some of them still had doubts because they felt that their were possible explanations for the similarities, but they also felt that these explanations were unreasonable. The two jurors who disagreed then conveyed their positions. One juror felt more sure than before that Pamela had cheated but still wanted positive proof in order to find her in violation because she felt that a statement of violation carried with it a moral censure. Therefore, as a matter of conscience, she didn't want to follow the guidelines set forth in the Honor Code concerning reasonable doubt. The second juror's doubts had increased. This juror no longer felt that she had proof beyond a reasonable doubt, but she also didn't want to block consensus just because her definition of reasonable was different from that of the rest of the jury. A third juror reminded the two who wanted to stand outside of consensus that they were not the ones who were guilty. The jury had tried very hard to construct a reasonable explanation, but they couldn't make it reasonable because the facts that proved that Pamela had cheated were "glaringly there". At this point it became evident that full consensus was not going to be reached, so the Chair moved for consensus with the two jurors standing outside on the following statement of violation: "The jury finds that Pamela violated the Honor Code by using outside sources to complete her homework." This statement was then amended so that the juror who disagreed with the process but still felt that Pamela was guilty could also reach consensus. The jury reached consensus to the following statement of violation with one member standing outside of consensus: 'The jury finds, beyond a reasonable doubt, that Pamela violated the Honor Code by using outside sources to complete her homework" (statement later withdrawn).

Next the jury discussed the possible violation of lying to a jury. To many jurors it seemed obvious that if an agreement was reached to the effect that Pamela had cheated then she also must have lied to the jury by stating several times that she didn't cheat. But others weren't confident enough in their first decision to say for certain that Pamela had lied also. One juror pointed out that all of his doubts were magnified when they led to a second violation. Another juror brought up the perjury resolution from spring plenary of '93 as a possible guideline. Unfortunately this resolution did not provide any clarity because it seemed to rely on other resolutions that were not passed by the student body (for example the standards of evidence resolution). There was also a debate as to whether there was a difference between "beyond a reasonable doubt" and "conclusive," the word used in the resolution. No agreement was reached. At least 4 of the jurors did not want to find Pamela in violation for lying to the jury. The others still thought that if the jury found the first violation then obviously Pamela lied as well. At this point the jury took another long break.

When the jury reconvened the Chair said that he was withdrawing his consent to the previous statement of violation because, based on the previous discussion, the jury seemed to have too many doubts. The juror who had stood outside said that if the Chair had not withdrawn his consent she would have blocked consensus. Some jurors felt stronger about their decision that Pamela had copied her homework, still others expressed their doubts. The Chair said that usually in difficult decisions such as this one, the jury becomes more confident over time after consensing to a violation, and he was concerned that this didn't seem to be happening in this case.

Once again the jury debated whether or not the evidence they had constituted proof beyond a reasonable doubt, and once again the jury was divided. Most of the jurors felt beyond
a reasonable doubt that a violation had occurred. A few people agreed with this position but
still had nagging doubts, and one juror still felt that her doubt was reasonable enough to block
consensus. This juror thought that it was possible that Pamela had used the example from the
book and Horatio’s help to come up with her solutions. One juror argued that this
explanation didn’t fully address the magnitude of the similarities between the homework and
the solution set. The first juror said that she thought the explanation did address the
similarity. Two jurors expressed frustration over rehashing the same evidence because it
always led to the same conclusion, a divided jury.

The jury then set out to come up with a different approach to the evidence. One juror
suggested getting an outside opinion to assess the probability that Pamela’s homework was
copied. The jury concluded that this would not resolve the issue because the question of
reasonable doubt could not be answered by quantifying the doubt into a statistical probability;
reasonable doubt was still a line that each juror had to draw individually. Another juror
asserted that it wasn’t enough that the jury could come up with a theoretically possible
explanation for the similarity, the fact remained that the similarities between the two
problems and the solution set were “glaringly obvious.” She went on to say that the jury had a
responsibility to Professor Goodmeyer to take this similarity into account, and a responsibility
to the community to do what was right. She concluded by saying that her brother had warned
her that the Honor Code could never work because 12 people could never get together and say
that someone lied. Another juror responded by saying that she had thought about her
responsibilities and that she thought it would destroy the Code more to find an innocent
person guilty than it would to let a guilty person go. Another juror pointed out that the mood
of the room had changed, the evidence no longer seemed glaringly obvious, and the jury was
coming up with different ideas.

After a silent ten minute break the jury got together to figure out where everyone stood.
Eight jurors felt beyond a reasonable doubt that Pamela had violated the Honor Code by
copying two of her homework problems from the solution set. Of these eight jurors two still
had some doubts. The opinions of the other four jurors were as follows:

Juror 1) a) The evidence is not glaringly obvious. b) Pamela’s story does explain her
answer. c) She was unable to resolve the question of “if Pamela had the problem set then why
would she have called Horatio for help?” d) The effects of finding an innocent person guilty
are worse then any possible effects of releasing an abstract to the community saying that the
jury couldn’t find a violation.

Juror 2) a) The responsibility to the community is one that has been taken seriously and
that it is this responsibility that makes it impossible to punish someone who didn’t do
anything wrong. b) Pamela’s two problems aren’t exact replicas of the solution manual, they
are just extremely close. Since this is all the jury based its judgement on, if there is an
explanation for the exactness then the jury has a responsibility to look at it. c) There is a
counter argument for every piece of evidence.

Juror 3) a) Didn’t know whether or not Pamela had copied because there wasn’t enough
evidence to prove anything either way. b) Math assignments lend themselves to similar
answers. c) There was a possibility of formulating the answers given the text and help from a
friend. d) Concerning responsibility to the community, Honor Code juries have taken the
responsibility of finding people in violation for cases that are more clear cut than this one.
Unfortunately this case walks a fine line of grey that forces a statement of “I don’t know” in a
situation where a clear opinion would be preferable, but under the circumstances is not
possible.
Juror 4) a) The question of why Pamela called Horatio if she had the solution set is concerning because it doesn't make sense that she would try to do the homework by asking for help on the last problem and then copy the answers from a solution set. b) 7-23 looks like the example in the textbook. c) Horatio told her how to do 7-25. d) This means that the similarities between Pamela's work and the solution set can be explained down to 3 lines of similar writing which just isn't enough to say that Pamela copied.

At this point the jury agreed that unless Horatio were to contradict Pamela's story by a) saying that he didn't help her with the assignment under question, or b) not understanding the concept of a whoozit, the jury would have to conclude that they could not reach consensus. If Horatio did contradict Pamela's story then the jury would find Pamela in violation of the Honor Code for cheating on her homework and for lying to the jury. Since it was Monday and Horatio was due to be back in town the Chair called him. Horatio's story agreed with Pamela's; he had helped her with her homework, and he knew what a whoozit was.

Therefore the jury reached consensus that the trial was over because the jury was unable to make a decision. The jury was encouraged to discuss their decision with Professor Goodmeyer, and the Chair informed Pamela of the result and the closeness of the outcome of the trial.

Questions

1) Do you agree with the outcome of this trial?

2) What does "proof beyond a reasonable doubt" mean, and how should juries apply this to decisions?

3) When should a jury find a student in violation of the Honor Code for perjury?