This is the script for Slide 22. We need seven students (Annie, Julie, Bill, Larry, Pat, Alli, Jerry) and one teacher to play the roles. The rest of us be thinking about which mathematical practices are being used.

Teacher: Who would like to answer 1a?
Julie: I would. I think the answer is no.
Teacher: Why do you think it is not a function Julie?
Julie: I just think so.
Teacher: What do you remember about functions that makes you think so?
Julie: Something about having two twos or two ones makes it a no, but I don't remember why.
Teacher: Yes, Julie, you are on the right track. Can anyone tell us what Julie is trying to remember?
Pat: Yes I can. But the same numbers have to be in the first position, not the second one.
Teacher: Why is that Pat?
Pat: Something about a domain or range. I don't remember.
Alli: I remember now. If you graph them the points can't be above or below each other or the function will fail the pencil test.
Teacher: Yes, Alli. Please explain what the pencil test is?
Alli: You hold a pencil straight up and down and it can't touch the function in two spot at the same time as you move it right to left. So if you graph these points they pass the pencil test. So I would have to say it IS a function.
Teacher: Julie, do you agree with Alli?
Julie: Yes, now I remember. I guess I could have just graphed them to see if they passed the pencil test.
Teacher: Does anyone have anything to add to 1a?
Bill: Yes. I remember that if there are two numbers in the domain that are the same with different range values, it is not a function.
Teacher: What is the domain?

Bill: The x values, or the first number in the pair. The range is the second numbers in the pair. There must be a unique y for every x.
Teacher: Thanks Bill. How about 1b?
Julie raises her hand but the teacher says: Hold that thought Julie! I bet you have the answer but I want to see how many students will help us solve this problem. Annie?
Annie: I don't really know where to start.
Teacher: Can anyone give Annie a small hint at the first step?
Julie: Think about the graph.
Annie: Can I use my calculator?
Teacher: Sure.
Annie: How do I put the plus/minus sign on the calculator?
Teacher: Can anyone explain how to do that?
Bill raises his hand, and so does Julie.
Teacher: I see Bill and Julie's hands up. Anyone else think they just might know how to do that or want to take a guess?
Larry: I'm not sure but maybe just put one y as the plus and another y as the minus.
Teacher: Try that Annie.
Annie: It is not a function because it does not pass the pencil test – it is a circle!
Teacher: Who can answer 1c?
Julie, Pat, Bill, Annie, and Larry all raise their hands. **Teacher** points to each of them and smiles at them. **Teacher:** How many of you know the answer but aren't raising your hand? **Jerry** (who does not have his hand raised), what do you think?
Jerry: It passes the pencil test so it is a function.
Teacher: Thanks Jerry.