

Episode 3.1.3

Later in the same class, the teacher circulates among students that are still working on the CD player problem:

1. S3: What would you use for the common difference? -10 or 2 ?
2. T: Well, I'm looking at two different sequences here, right? Here's one sequence, here's another sequence.
3. S3: So you're actually writing two equations?
4. T: Mhmm.

And later:

5. T: No, look at this. Look at this right here. $300, 290, 280, 270$. What I want you to do is I want you to generate a formula for this sequence.
6. S4: $x-3$?
7. T: $x-3$?
8. S4: Oh, wait, no. For the second one [inaudible] $x+2$.
9. T: $x+2$?
10. S4: See, $15+2$ is 17 , $17+2$ is [pause]
11. T: So that's a recursive formula, right? I want the explicit formula. And then do the same thing here. $15, 17, 19$ [pause] get me a formula that's going to generate this sequence. OK? So I want to see two formulas. One for this sequence and one for this sequence.