Activity 2 of Lesson 1: Analyzing Student Thinking Continued

Task 2: Let's keep working with this faucet that dripped 6 ounces of water in 8 minutes. How many ounces dripped in 40 minutes? This time can you do it in your head, or is there a way to just think about it without using a math formula?

| Bonita: | I can't do it in my head, it's, it's |
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| Interviewer | What if this was a 16 instead of a 40? How many ounces in 16 |
| | minutes? Could you do it in your head then? |
| Bonita: | Um, I have problem with thinking of these, like, in, in my head. I don't |
| | calculator, or write it down. |

Task 3:

Crystal placed a bucket under a faucet and collected 6 ounces of water in 20 minutes. Joanne placed a bucket under a second faucet and collected 3 ounces of water in 10 minutes. Were the faucets dripping equally fast or was one dripping faster than the other?



| Bonita: | Crystal's is slower cos' it took its time. It was like, really slow, and it got |
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| | behind. |
| Interviewer: | OK. |
| Bonita: | Oh, wait, I've got it backwards. I'm thinking that this one (points to |
| | Crystal's faucet) was faster |
| Interviewer: | OK, how come? |
| Bonita: | 'cos in 20 minutes it got 6 ounces, and, yours, um, it took 10 minutes to |
| | gain 3 ounces of water. |
| Interviewer: | So when you're saying this one's going faster, are you looking at all |
| | four numbers or just some of them? |
| Bonita: | I'm comparing 20 to 10 and 6 to 3. So, all four of them. |
| Interviewer: | And is it because these are bigger numbers than these that it's going |
| | faster? |
| Bonita: | Yeah. |

Questions to Discuss in Groups:

1. Do you think Bonita is reasoning proportionally? Why or why not?

- 2. For Task 3, why do you think Bonita:
 - a. thought that Crystal's faucet was dripping slower?
 - b. thought that Crystal's faucet was dripping faster?
- 3. Solve Task 3 by **drawing** a picture and using reasoning only (no equations or formulas)

4. Reflect on Bonita's work across the 3 tasks: What conclusions did you draw? [What do you think was the point of Activities 1 and 2 from today?]

Decide who will share your group response to each question with the whole class. Be sure everyone presents.