

**Activity 1 of Lesson 2:**  
***Characterize a Type of Non-Proportional Reasoning***

**Questions to Discuss:**

1. Characterize in general the type of reasoning that you see in both the students' responses to the Orange Juice Task and Bonita's initial response to the last Leaky Faucet Task (see work on back):
  
  
  
  
  
  
  
  
  
  
2. If you are a student reasoning in the way you described for Question 1, how might you respond to the following task:

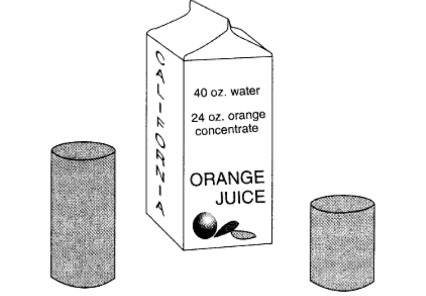
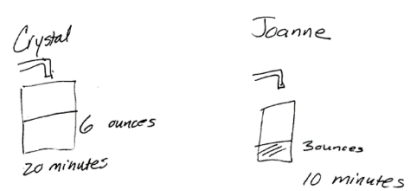
**Swimming Pool Task:** Water is being pumped through a hose into a large swimming pool. The table shows the amount of water in the pool over time.

Do you think the water is being pumped equally fast over time or is it being pumped faster at certain times?

<b>Time in minutes</b>	<b>Amount of Water in gallons</b>
<b>0</b>	<b>0</b>
<b>3</b>	<b>6</b>
<b>5</b>	<b>10</b>
<b>9</b>	<b>18</b>

**Reminders of Students' Work on the Orange Juice Task  
& Bonita's Response to the Faucet Task are on the Back**

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 <p>A diagram showing a carton of orange juice concentrate and two glasses. The carton is labeled "40 oz. water", "24 oz. orange concentrate", and "ORANGE JUICE". To the left is a tall, narrow glass labeled "7-oz. glass of California orange juice". To the right is a shorter, wider glass labeled "4-oz. glass of California orange juice".</p> <p>Would the 7-oz. glass taste the same as the 4-oz. glass? If they don't taste the same, can you tell which one would taste more orangy?</p>	<ul style="list-style-type: none"><li>• One student said the juice in the large glass would taste more orangey "because the glass is bigger, so it would hold more orange"</li><li>• Other students explained that the juice in the large glass would taste less orangey because it can hold more water.</li></ul>
 <p>Two hand-drawn diagrams of faucets. The first is labeled "Crystal" and shows a faucet dripping into a glass. The glass is labeled "6 ounces" and "20 minutes". The second is labeled "Joanne" and shows a faucet dripping into a glass. The glass is labeled "3 ounces" and "10 minutes".</p>	<p>Bonita initially said that Crystal's faucet was slower because "it took its time. It was like, really slow, and it got behind."</p>