

## College Preparatory Mathematics Chapter 9 Sample Argumentation Task

### 9-29. WHICH IS SWEETER?

Kay and Bill love hummingbirds. Every spring, they hang feeders around their gardens with a mixture of water and corn syrup the birds enjoy drinking. Today they are comparing the sweetness of their recipes, shown below.



Bill thinks his is sweeter. *"Mine has 5 cups of corn syrup and yours only has 3!"*

Kay thinks hers is sweeter. *"But mine has a higher percentage of corn syrup,"* she argues.

<b>Kay's Recipe</b> 2 quarts water 3 cups corn syrup
--

<b>Bill's Recipe</b> 2 gallons water 5 cups corn syrup
--

- Help Kay and Bill calculate the percentage of corn syrup in each person's recipe.
- Which information is most important to decide which mixture is sweeter: the amount of corn syrup in each recipe, or the percentage of corn syrup? Which recipe makes a sweeter mixture? Discuss this with your team and be prepared to explain your ideas to the class.

This last sample can be adjusted to be a HIGH QUALITY argument task. The scenario has two characters with **opposing views** and provides visuals to help students create evidence and work out their reasoning. If used as an argument task, I would shy away from using part a because it gives the students the strategy to use instead of asking them to develop it on their own. I would simply give the scenario and ask "who is correct? Write an argument to explain your reasoning."

"Kay and Bill love hummingbirds. Every spring they hang bird feeders in their gardens with a mixture of corn syrup and water. Kay's mixture is 2 quarts of water and 3 cups of corn syrup. Bill's mixture is 2 gallons of water and 5 cups of corn syrup. Whose mixture is sweeter? Provide evidence to support your answer, and explain how you know your evidence is correct."