

Family of Tasks

Comparing Decimals

By Bradley Allen

2.099 ○ 2.1

This is a simple “greater than, equal to, or less than” problem. After identifying its potential, we can easily turn this into a mathematical argumentation problem focusing on place value and the possible misconception that comes with seeing a larger digit to the right of a smaller digit! First we turn it into a statement and then ask students to respond.

“2.099 is greater than 2.1. Do you agree or disagree? Why or why not?”

Variations:

- Jose thinks 2.099 is greater than 2.1. Do you agree or disagree? Explain your answer.
- Jose thinks 2.1 is greater than 2.099. Do you agree or disagree? Why? Write your claim and consider your warrants in your response.

Notice how in this last variation Jose actually thinks the correct answer. This is a good way to make sure students do not always assume they are supposed to disagree in every argument.