# Lesson 16: Reason About Quotients

### Standards Alignments

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| --- | --- |
| Addressing | 5.NF.B.7, 5.NF.B.7.b |

### Teacher-facing Learning Goals

* Assess the reasonableness of quotients.
* Divide unit fractions and whole numbers.

### Student-facing Learning Goals

* Let’s apply what we know about division to make sure our answers make sense.

### Lesson Purpose

The purpose of this lesson is for students to find quotients involving a whole number and a unit fraction and assess the reasonableness of their answers.

In previous lessons students found the value of quotients of a unit fraction and a whole number. In this lesson they think about comparing the value of these quotients without calculating. For example, students know from earlier work that is less than because there are more groups of 2 in 48 than groups of 4. By the same reasoning is less than because s are smaller than s and so it takes more s to make an amount. This kind of reasoning also shows that is less than because dividing the same amount into more pieces creates smaller pieces.

### Access for:

### Students with Disabilities

* Engagement (Activity 1)

### Instructional Routines

Estimation Exploration (Warm-up), MLR1 Stronger and Clearer Each Time (Activity 1)

### Lesson Timeline

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| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 20 min |
| Activity 2 | 15 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

Reflect on a time your thinking changed about something in class recently. How will you alter your teaching practice to incorporate your new understanding?

## Cool-down

(to be completed at the end of the lesson) 5min

Both Types of Problems

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 5.NF.B.7 |

### Student-facing Task Statement

Which is greater, or . Explain or show your reasoning.

### Student Responses

Sample response: is greater than . is greater than 1 because there are a lot more than one thirds in 5. is less than 1 because is being divided into smaller pieces.