

# Lesson 13: Use Equivalent Fractions to Compare

## Standards Alignments

Addressing 4.NF.A.1, 4.NF.A.2

### Teacher-facing Learning Goals

- Compare two fractions by rewriting one of them into an equivalent fraction with the same denominator as the other.

### Student-facing Learning Goals

- Let's compare fractions by writing an equivalent fraction.

## Lesson Purpose

The purpose of this lesson is for students to compare two fractions by rewriting one of them as an equivalent fraction with the same denominator as the other.

Previously, students used various strategies and representations to reason about the relative size of fractions. In this lesson, they focus on writing equivalent fractions as a way to compare fractions. Here the denominator of one fraction is a factor or a multiple of the denominator of the other fraction, making it likely for students to see one fraction in terms of the fractional part of the other. In a future lesson, students will compare fractions in which the denominators have no common factors.

### Access for:

#### Students with Disabilities

- Representation (Activity 1)

#### English Learners

- MLR7 (Activity 1)

## Instructional Routines

Notice and Wonder (Warm-up)

### Lesson Timeline

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

### Teacher Reflection Question

How readily did students grasp the idea of writing equivalent fractions with a common denominator as a way to compare fractions? What evidence did you see of students connecting it to the reasoning they did about equivalent fractions on number lines? How could the connections be made more explicit?

**Cool-down** (to be completed at the end of the lesson)

🕒 5 min

## Make It True

**Standards Alignments**

Addressing 4.NF.A.2

**Student-facing Task Statement**

Compare each pair of fractions. Use the symbols  $<$ ,  $=$ , and  $>$  to make each statement true. Explain or show your reasoning.

1.  $\frac{15}{8}$  \_\_\_\_\_  $\frac{7}{4}$
2.  $\frac{2}{5}$  \_\_\_\_\_  $\frac{30}{100}$

**Student Responses**

1.  $\frac{15}{8} > \frac{7}{4}$ . Sample reasoning:  $\frac{7}{4}$  is equivalent to  $\frac{14}{8}$ , so it is less than  $\frac{15}{8}$ .
2.  $\frac{2}{5} > \frac{30}{100}$ . Sample reasoning:  $\frac{2}{5}$  is equivalent to  $\frac{40}{100}$ , so it is greater than  $\frac{30}{100}$ .