Lesson 16: Compare and Order Fractions

Standards Alignments

Building On	4.OA.B.4
Addressing	4.NF.A.2

Teacher-facing Learning Goals

- Compare and order fractions using any strategy.

Student-facing Learning Goals

- Let's put some fractions in order.

Lesson Purpose

The purpose of this lesson is for students to compare and order fractions using any strategy.

Throughout the unit, students have encountered a wide range of fractions and learned a variety of ways to represent and compare fractions. In this lesson students consolidate their understanding and skills and use them to solve new fraction comparison problems strategically and with flexibility.

This lesson has a Student Section Summary.

Access for:

Students with Disabilities

- Representation (Activity 2)

English Learners

- MLR8 (Activity 1)

Instructional Routines

Number Talk (Warm-up)

Materials to Copy

- Compare Stage 3-8 Directions (groups of 2): Activity 1
- Fraction Cards Grade 4 (groups of 2): Activity 1

Lesson Timeline

Warm-up	10 min

Teacher Reflection Question

As you wrap up this unit, reflect on the norms that have supported your students in learning math. How have you seen each student grow as

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

a learner? How have you seen yourself grow as a teacher?

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

All in Order

Standards Alignments

Addressing 4.NF.A.2

Student-facing Task Statement

Put these fractions in order, from least to greatest. Show your reasoning.

$\frac{5}{12}$ $\frac{8}{6}$ $\frac{4}{10}$ $\frac{7}{5}$

Student Responses

$\frac{4}{10}, \frac{5}{12}, \frac{8}{6}, \frac{7}{5}$. Sample reasoning:

- $\frac{4}{10}$ and $\frac{5}{12}$ are less than 1. $\frac{8}{6}$ and $\frac{7}{5}$ are greater than 1.
- Comparing $\frac{4}{10}$ and $\frac{5}{12}$: $\frac{4 \times 6}{10 \times 6} = \frac{24}{60}$ and $\frac{5 \times 5}{12 \times 5} = \frac{25}{60}$, so $\frac{5}{12}$ is greater.
- Comparing $\frac{8}{6}$ and $\frac{7}{5}$: $\frac{8 \times 5}{6 \times 5} = \frac{40}{30}$ and $\frac{7 \times 6}{5 \times 6} = \frac{42}{30}$. Or: $\frac{8}{6}$ is $\frac{2}{6}$ more than 1, while $\frac{7}{5}$ is $\frac{2}{5}$ more than 1. Since $\frac{2}{5}$ is greater than $\frac{2}{6}$, $\frac{7}{5}$ is greater than $\frac{8}{6}$.