

# Lesson 15: Multiply More Fractions

## Standards Alignments

Addressing 5.NF.B.3, 5.NF.B.4, 5.NF.B.4.a, 5.NF.B.4.b

### Teacher-facing Learning Goals

- Multiply whole numbers and fractions using the properties of operations.

### Student-facing Learning Goals

- Let's multiply mixed numbers.

## Lesson Purpose

The purpose of this lesson is for students to apply their understanding of the properties of operations to multiply whole numbers and fractions greater than 1 written as mixed numbers.

In previous lessons, students used the properties of operations to write equivalent expressions in order to find products of fractions greater than 1 written as mixed numbers. In this lesson, students apply their understanding of the properties of operations to multiply whole numbers and fractions greater than 1 written as mixed numbers. In each activity, encourage students to think flexibly, using everything they have learned about fraction decomposition, multiplication, and the properties of operations.

### Access for:

#### Students with Disabilities

- Engagement (Activity 2)

#### English Learners

- MLR7 (Activity 2)

## Instructional Routines

Number Talk (Warm-up)

### Lesson Timeline

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

### Teacher Reflection Question

Who has been sharing their ideas in class lately? Make a note of students whose ideas have not been featured in class and look for an opportunity for them to share their thinking in tomorrow's lesson.

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

🕒 5 min

## Mixed Number Multiplication

**Standards Alignments**

Addressing 5.NF.B.4

**Student-facing Task Statement**

Find the value of each expression. Explain or show your reasoning.

1.  $12 \times 9\frac{2}{3}$
2.  $3\frac{5}{9} \times 18$

**Student Responses**

1. 116:  $12 \times 9 + (12 \times \frac{2}{3}) = 108 + 8 = 116$
2. 64:  $(3 \times 18) + (\frac{5}{9} \times 18) = 54 + 10 = 64$