# 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 |
| Cool-down | 5 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) 5min

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

### Student Responses

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