# Lesson 9: Use Equivalent Expressions

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 5.NF.A.1, 5.NF.A.2 |

### Teacher-facing Learning Goals

* Use equivalent expressions to add and subtract fractions with unlike denominators.

### Student-facing Learning Goals

* Let’s use equivalent expressions to add and subtract fractions with unlike denominators.

### Lesson Purpose

The purpose of this lesson is for students to add and subtract fractions with unlike denominators by replacing the given expressions with equivalent expressions with common denominators.

In a previous lesson, students saw that having a common denominator is useful for adding or subtracting fractions. In this lesson students add and subtract fractions using equivalent expressions where the fractions have the same denominator. Students work with denominators where one is a multiple of the other so they only need to change the denominator in one of the 2 fractions. In each case the numerators are chosen so that either denominator works as a common denominator and students compare different strategies for finding the sum or difference.

### Access for:

###  Students with Disabilities

* Action and Expression (Activity 1)

###  English Learners

* MLR8 (Activity 3)

### Instructional Routines

True or False (Warm-up)

### Lesson Timeline

|  |  |
| --- | --- |
| Warm-up | 10 min |
| Activity 1 | 15 min |
| Activity 2 | 15 min |
| Activity 3 | 10 min |
| Lesson Synthesis | 10 min |
| Cool-down | 5 min |

### Teacher Reflection Question

How effective were your questions in advancing students’ thinking today? What did students say or do that showed they were effective?

## Cool-down

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

Write an Expression

### Standards Alignments

|  |  |
| --- | --- |
| Addressing | 5.NF.A.1 |

### Student-facing Task Statement

Find the value of $\frac{9}{12}−\frac{1}{4}$.

### Student Responses

$\frac{2}{4}$ or equivalent