

# Lesson 2

## Fractions

NAME: \_\_\_\_\_



Start by navigating to the Online Lesson for instructions.

### Objectives

- ✓ Write a fraction in simplest form
- ✓ Write mixed numbers as improper fractions
- ✓ Perform all operations on fractions, including mixed numbers: adding, subtracting, multiplying, dividing, and raising to a power

### Why?

We learn to work with fractions so we can understand and compare parts of a whole. Real-world problems like splitting a pizza, adjusting a recipe, or figuring out discounts and measurements all use fractions. Learning fractions builds the skill you will need for algebra, geometry, and everyday decision-making with numbers.

### Explore

#### Fractions

▶ *Fill in the notes as you watch the video in the Online Lesson.*

- \_\_\_\_\_ must have the same \_\_\_\_\_ in order to add or subtract them.
- Write mixed numbers as improper fractions \_\_\_\_\_ multiplying or dividing.

It is helpful to rewrite all mixed numbers as improper fractions before performing any operations.

- Fractions do not need to be written as mixed numbers, but they do need to be \_\_\_\_\_.
- When directions say \_\_\_\_\_, calculate the value by performing the given operation on the fraction and then write it in simplest form.
- Simplest form means that the \_\_\_\_\_ of the numerator and denominator is \_\_\_\_\_.

**Example 1**

▶ Complete the example as you watch the video in the Online Lesson.

**Evaluate.**

$$2\frac{4}{7} - \left(-\frac{2}{3}\right)$$

**Implement**

**Explain**

- ▶ Rewrite the mixed number as an improper fraction
- ▶ Simplify the double negative and find the LCD
  
- ▶ Write fractions with the LCD
  
- ▶ Add the numerators

**Example 2**

▶ Complete the example as you watch the video in the Online Lesson.

**Evaluate.**

$$-3\frac{1}{5} \div \left(1\frac{1}{3}\right)$$

**Implement**

**Explain**

- ▶ Rewrite mixed fractions as improper fractions
- ▶ Take the reciprocal of the fraction after the division symbol
  
- ▶ Simplify fractions

 Practice

Evaluate. Show your work. Answers do not need to be written as mixed numbers.

1)  $-4\frac{2}{3} - \left(-\frac{4}{5}\right)$

2)  $3\frac{3}{4} \cdot 2\frac{2}{13}$

3)  $\frac{7}{12} - \frac{1}{3}$

4)  $\frac{9}{10} \div 1\frac{1}{2}$

5)  $2\frac{3}{4} - \frac{5}{6}$

6)  $-3\frac{2}{5} \div 1\frac{2}{7}$

Evaluate. Show your work. Answers do not need to be written as mixed numbers.

7)  $\frac{3}{4} \cdot 2\frac{2}{9}$

8)  $-\frac{2}{5} - 5\frac{1}{3}$

9)  $\frac{5}{9} - \frac{5}{6}$

10)  $\frac{8}{21} \div \frac{9}{14}$

11)  $2\frac{2}{5} \cdot \frac{9}{16}$

12)  $4\frac{2}{3} - 1\frac{1}{8}$



To continue, return to the Online Lesson.