

Objectives:

- Students will memorize the multiplication table, as evidenced by them passing “minute quizzes.”
- Students will write fractions from sectors of circles, as evidenced by them completing a warm-up worksheet where they do so.
- Students will add and subtract fractions with differing denominators, as evidenced by them completing a homework assignment where they do so.

Student Materials on Desk Corner:

- Homework Checker
- Readiness Checker

Student Materials for Class:

- Homework Log
- Binder Paper
- Pencils

Teacher Materials:

- “Warm-up 2-22” for each student
- “Minute Quiz 2-22” for each student
- “Adding & Subtracting Fraction” review packet for each student

Homework:

- Adding & Subtracting Fractions Packet

Time	Activity
Before Bell	<p style="text-align: center;">DO NOW</p> <p>As students enter the classroom, shake hands and remind students that there is a minute quiz, so students need to be seated quietly with a pencil when the bell rings.</p>
10 min	<p style="text-align: center;">MINUTE QUIZ, HOMEWORK COLLECTION, AND WARM-UP</p> <p>Minute Quiz When the bell rings, quickly go around and put the minute quiz on each student’s desk, facedown. Then, start everyone on the quiz at the same time and give everyone one minute. While students are working on the quiz, stamp the readiness checkers of students who were ready when the bell rang and had their readiness checkers out.</p> <p>Homework Collection There wasn’t any homework because there was a unit test last lesson. So, students get a free homework stamp. Instruct the TA go around and stamp homework checkers.</p> <p>Warm-up After the minute quiz, students should work on the warm-up while you take attendance.</p>
40 min	<p style="text-align: center;">LESSON: ADDING AND SUBTRACTING FRACTIONS</p> <p>Packet Give students the “Adding and Subtracting Fractions” review packet. Go over the first two pages with the class. Then, have students work on the remainder of the packet.</p>
30 min	<p style="text-align: center;">ALEKS</p> <p>When students finish their packets, they should continue with ALEKS. Use this student work time to return graded homework.</p>

Find the prime factorization of the following whole numbers.

1) 36

2) 24

3) 56

4) 100

5) 28

6) 18

Find the prime factorization of the following whole numbers.

1) 36

2) 24

3) 56

4) 100

5) 28

6) 18

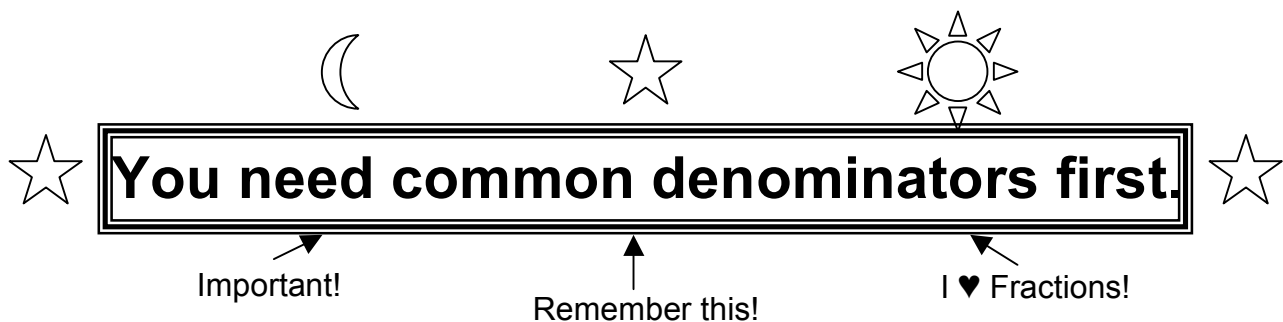
Dear Student,

I am taking the day off to catch up on homework for my classes at Santa Clara University. The purpose of this packet is to help you *add and subtract fractions*. Be nice to the substitute teacher, and I'll see you on Wednesday.

Sincerely,

Mr. Wong

The **most important** point when adding and subtracting fractions is:



This means **adding across will give you the *wrong* answer!**

Here are the correct steps to add/subtract fractions:

Steps to Adding/Subtracting Fractions

- Step 1:** Find the least common multiple of the denominators, which gives us the smallest common denominator that works.
- Step 2:** Find equivalent fractions with the common denominator we found in step 1. Then, we can add how many slices we have (that is, we can add the numerators).
- Step 3:** Simplify the answer.

Let's review before doing an example:



Now, let's try adding/subtracting fractions. In the left column is an example that has been done for you. In the right column is a problem that you can try. Draw a star in the bottom-right corner of this page and I will give you one point extra credit. Some of it has been done for you.

Example	You Try: Fill in the Blanks & Brackets
<p>Ex.) $\frac{1}{4} + \frac{5}{6}$</p> <p>Step 1: Find lcm(4,6), which is the best common denominator to use.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> $\begin{array}{c} 4 \\ \swarrow \quad \searrow \\ (2) \quad (2) \\ 4 = 2 \cdot 2 \end{array}$ </div> <div style="text-align: center;"> $\begin{array}{c} 6 \\ \swarrow \quad \searrow \\ (2) \quad (3) \\ 6 = 2 \cdot 3 \end{array}$ </div> </div> <p style="text-align: center;">lcm(4,6) = $2 \cdot 2 \cdot 3 = 12$.</p> <p>Step 2: Find equivalent fractions and add.</p> $\begin{array}{l} \frac{1}{4} = \frac{1 \cdot 3}{4 \cdot 3} = \frac{3}{12} \\ \frac{5}{6} = \frac{5 \cdot 2}{6 \cdot 2} = \frac{10}{12} \end{array} \quad \begin{array}{l} \nearrow \\ \searrow \end{array} \quad \frac{3}{12} + \frac{10}{12} = \frac{13}{12}$ <p>Step 3: Simplify.</p> $\begin{array}{r} 12 \overline{)13} \Rightarrow \frac{13}{12} = \boxed{1 \frac{1}{12}} \\ \underline{12} \\ 1 \end{array}$	<p>1) $\frac{5}{6} + \frac{3}{8}$</p> <p>Step 1: Find lcm(____,____), which is the best common denominator to use.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> $\begin{array}{c} 6 \\ \swarrow \quad \searrow \\ \bigcirc \quad \bigcirc \\ 6 = _ \cdot _ \end{array}$ </div> <div style="text-align: center;"> $\begin{array}{c} 8 \\ \swarrow \quad \searrow \\ \bigcirc \quad \bigcirc \\ \swarrow \quad \searrow \\ \bigcirc \quad \bigcirc \\ 8 = _ \cdot _ \cdot _ \end{array}$ </div> </div> <p style="text-align: center;">lcm(____,____) = $_ \cdot _ \cdot _ \cdot _ = 24$.</p> <p>Step 2: Find equivalent fractions and add.</p> $\begin{array}{l} \frac{5}{6} = \frac{5 \cdot [\]}{6 \cdot [\]} = \frac{[\]}{24} \\ \frac{3}{8} = \frac{3 \cdot [\]}{8 \cdot [\]} = \frac{[\]}{24} \end{array} \quad \begin{array}{l} \nearrow \\ \searrow \end{array} \quad \frac{[\]}{24} + \frac{[\]}{24} = \frac{[\]}{24}$ <p>Step 3: Simplify.</p> $\begin{array}{r} [\] \\ 24 \overline{)29} \Rightarrow \frac{[\]}{24} = [\] \frac{[\]}{24} \\ \underline{[\]} \\ [\] \end{array}$

Great job! Hopefully, things make more sense now.

On the next page, you'll have some more problems to try. Once you finish, you can work on ALEKS for the rest of the period. Any problems that you don't finish become your homework, so get working!

Remember,

You need common denominators first!

Add the following fractions using the three steps on the first page.

$$2) \frac{1}{4} + \frac{5}{6}$$

$$3) \frac{3}{8} + \frac{1}{2}$$

$$4) \frac{7}{12} + \frac{5}{8}$$

$$5) \frac{1}{4} + \frac{2}{3}$$

Subtract the following fractions using the three steps on the first page.

$$6) \frac{9}{6} - \frac{9}{8}$$

$$7) \frac{2}{3} - \frac{2}{9}$$

$$8) \frac{11}{24} - \frac{3}{8}$$

$$9) \frac{5}{6} - \frac{2}{5}$$