

Objectives:

- Students will memorize the multiplication table, as evidenced by them passing “minute quizzes.”
- Students will find the least common multiple of whole numbers, 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 #2-27
- Homework Checker
- Readiness Checker

Student Materials for Class:

- Homework Log
- Binder Paper
- Pencils

Teacher Materials:

- “Warm-up 2-28” for each student
- “Minute Quiz 2-28” for each student
- “Homework #2-27” answer key and grading roster for TA
- “Homework #2-28” handout for each student

Homework:

- Finish Homework #2-28
- ALEKS

Time	Activity
10 min	<p style="text-align: center;">MINUTE QUIZ, WARM-UP, HOMEWORK COLLECTION, AND ATTENDANCE</p> <p>Minute Quiz and Warm-up 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, pass out the warm-ups so that students can work on them once they’re done with the minute quiz. Also, stamp the readiness checkers of students who were ready when the bell rang and had their readiness checkers out.</p> <p>Homework Collection and Attendance Instruct the TA go around and collect homework and stamp homework checkers. Give the TA the answer key and have him or her grade the homework that was collected. During this time, take attendance.</p> <p>Warm-up & Notes Checker Once all the homework is collected, go around and stamp the students’ “Warm-up and Notes Checkers.”</p>
20 min	<p style="text-align: center;">LESSON: ADDING DIFFERING DENOMINATORS</p> <p>Notes Follow the handwritten Cornell Notes. Once students are finished, go around and stamp the students’ “Warm-up and Notes Checkers.”</p>
20 min	<p style="text-align: center;">CLASSWORK</p> <p>Pass out the homework/classwork handout and have students write down the assignment on their homework logs. Have the TA pass out fraction circles and write own which student has which set of fraction circles. Students should use the fraction circles to complete Homework #2-26, which will serve as the classwork.</p>
30 min	<p style="text-align: center;">ALEKS</p> <p>When students finish their classwork, they should continue with ALEKS. Use this student work time to return graded homework.</p>

Solve the following multiplication problems. You have exactly one minute!

$12 \cdot 9 =$

$7 \cdot 12 =$

$1 \cdot 7 =$

$7 \cdot 12 =$

$1 \cdot 8 =$

$3 \cdot 7 =$

$7 \cdot 8 =$

$4 \cdot 1 =$

$2 \cdot 7 =$

$11 \cdot 7 =$

$6 \cdot 7 =$

$8 \cdot 6 =$

Solve the following multiplication problems. You have exactly one minute!

$12 \cdot 9 =$

$7 \cdot 12 =$

$1 \cdot 7 =$

$7 \cdot 12 =$

$1 \cdot 8 =$

$3 \cdot 7 =$

$7 \cdot 8 =$

$4 \cdot 1 =$

$2 \cdot 7 =$

$11 \cdot 7 =$

$6 \cdot 7 =$

$8 \cdot 6 =$

Solve the following multiplication problems. You have exactly one minute!

$12 \cdot 9 =$

$7 \cdot 12 =$

$1 \cdot 7 =$

$7 \cdot 12 =$

$1 \cdot 8 =$

$3 \cdot 7 =$

$7 \cdot 8 =$

$4 \cdot 1 =$

$2 \cdot 7 =$

$11 \cdot 7 =$

$6 \cdot 7 =$

$8 \cdot 6 =$

Solve the following multiplication problems. You have exactly one minute!

$3 \cdot 2 =$

$11 \cdot 8 =$

$8 \cdot 7 =$

$11 \cdot 9 =$

$2 \cdot 2 =$

$7 \cdot 11 =$

$3 \cdot 10 =$

$12 \cdot 2 =$

$1 \cdot 2 =$

$10 \cdot 12 =$

$3 \cdot 9 =$

$11 \cdot 4 =$

Solve the following multiplication problems. You have exactly one minute!

$3 \cdot 2 =$

$11 \cdot 8 =$

$8 \cdot 7 =$

$11 \cdot 9 =$

$2 \cdot 2 =$

$7 \cdot 11 =$

$3 \cdot 10 =$

$12 \cdot 2 =$

$1 \cdot 2 =$

$10 \cdot 12 =$

$3 \cdot 9 =$

$11 \cdot 4 =$

Solve the following multiplication problems. You have exactly one minute!

$3 \cdot 2 =$

$11 \cdot 8 =$

$8 \cdot 7 =$

$11 \cdot 9 =$

$2 \cdot 2 =$

$7 \cdot 11 =$

$3 \cdot 10 =$

$12 \cdot 2 =$

$1 \cdot 2 =$

$10 \cdot 12 =$

$3 \cdot 9 =$

$11 \cdot 4 =$

Solve the following multiplication problems. You have exactly one minute!

$11 \cdot 10 =$

$6 \cdot 9 =$

$11 \cdot 10 =$

$6 \cdot 9 =$

$9 \cdot 9 =$

$12 \cdot 2 =$

$7 \cdot 4 =$

$12 \cdot 2 =$

$3 \cdot 4 =$

$6 \cdot 11 =$

$11 \cdot 3 =$

$1 \cdot 10 =$

Solve the following multiplication problems. You have exactly one minute!

$11 \cdot 10 =$

$6 \cdot 9 =$

$11 \cdot 10 =$

$6 \cdot 9 =$

$9 \cdot 9 =$

$12 \cdot 2 =$

$7 \cdot 4 =$

$12 \cdot 2 =$

$3 \cdot 4 =$

$6 \cdot 11 =$

$11 \cdot 3 =$

$1 \cdot 10 =$

Solve the following multiplication problems. You have exactly one minute!

$11 \cdot 10 =$

$6 \cdot 9 =$

$11 \cdot 10 =$

$6 \cdot 9 =$

$9 \cdot 9 =$

$12 \cdot 2 =$

$7 \cdot 4 =$

$12 \cdot 2 =$

$3 \cdot 4 =$

$6 \cdot 11 =$

$11 \cdot 3 =$

$1 \cdot 10 =$

Find the least common multiple of the following pairs of whole numbers.

1) 4 and 6

2) 6 and 9

3) 3 and 4

4) 6 and 9

5) 7 and 12

6) 2 and 6

Find the least common multiple of the following pairs of whole numbers.

1) 4 and 6

2) 6 and 9

3) 3 and 4

4) 6 and 9

5) 7 and 12

6) 2 and 6

Adding Fractions with Differing Denominators

Section → Steps

To add fractions with differing denominators,

Step 1: Find the least common multiple of the denominators.

This gives us what same sized pieces to use.

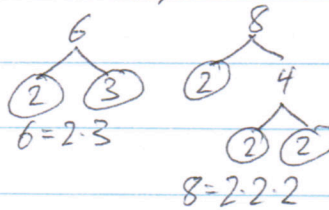
Step 2: Make same sized pieces by finding equivalent fractions. Then add.

Step 3: Simplify

Section → Example

Ex: $\frac{5}{6} + \frac{7}{8} = ?$

Step 1: Find $\text{lcm}(6, 8)$.



$$\text{lcm}(6, 8) = 2 \cdot 2 \cdot 2 \cdot 3 = 4 \cdot 2 \cdot 3 = 8 \cdot 3 = 24$$

Step 2: Make same sized pieces and then add.

$$\begin{array}{l} \frac{5}{6} = \frac{5 \cdot 4}{6 \cdot 4} = \frac{20}{24} \\ \frac{7}{8} = \frac{7 \cdot 3}{8 \cdot 3} = \frac{21}{24} \end{array} \quad \leftarrow \quad \frac{20}{24} + \frac{21}{24} = \frac{41}{24}$$

Step 3: Simplify.

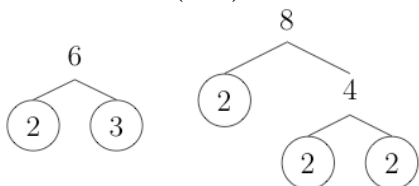
$$24 \overline{) 41}^1 \Rightarrow \frac{41}{24} = \boxed{1 \frac{17}{24}}$$

Add the following fractions by finding equivalent fractions with common denominators. Make sure you simplify your answer.

Ex.) $\frac{5}{6} + \frac{7}{8}$

1) $\frac{3}{4} + \frac{1}{6}$

Step 1: Find lcm(6, 8).



$6 = 2 \cdot 3$ $8 = 2 \cdot 2 \cdot 2$

$\text{lcm}(6, 8) = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 = 24$

Step 2: Make same sized pieces and then add.

$$\begin{array}{l} \frac{5}{6} = \frac{5 \cdot 4}{6 \cdot 4} = \frac{20}{24} \\ \frac{7}{8} = \frac{7 \cdot 3}{8 \cdot 3} = \frac{21}{24} \end{array} \quad \begin{array}{l} \nearrow \\ \searrow \end{array} \quad \frac{20}{24} + \frac{21}{24} = \frac{41}{24}$$

Step 3: Simplify.

$$24 \overline{) 41} \begin{array}{r} 1 \\ -24 \\ \hline 17 \end{array} \Rightarrow \frac{41}{24} = \boxed{1 \frac{17}{24}}$$

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

3) $\frac{2}{5} + \frac{7}{10}$

Subtract the following fractions by finding equivalent fractions with common denominators. Make sure you simplify your answer.

$$4) \frac{5}{9} - \frac{7}{12}$$

$$5) \frac{5}{4} - \frac{4}{5}$$

$$6) \frac{5}{8} - \frac{7}{12}$$

$$7) \frac{8}{9} - \frac{2}{3}$$