

Objectives:

- Students will memorize the multiplication table, as evidenced by them passing “minute quizzes.”
- Students will multiply whole numbers by fractions, as evidenced by them completing a warm-up worksheet where they do so.
- Students will, given a rectangular whole, draw fractions of the whole, as evidenced by them completing a homework assignment where they do so.
- Students will, given a rectangular fraction of a whole, draw the whole, as evidenced by them completing a homework assignment where they do so.
- Students will find fractions of collections of objects, as evidenced by them completing a homework assignment where they do so.

Student Materials on Desk Corner:

- Homework #2-29
- Homework Checker
- Readiness Checker

Student Materials for Class:

- Homework Log
- Binder Paper
- Pencils

Teacher Materials:

- “Warm-up 2-30” for each student
- “Minute Quiz 2-30” for each student
- “Homework #2-29” answer key and grading roster for TA
- “Homework #2-30” handout for each student

Homework:

- Finish Homework #2-30
- 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>
25 min	<p style="text-align: center;">LESSON: WHOLE-PART CONVERSION AND FRACTIONS OF COLLECTIONS</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>
25 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!

$4 \cdot 2 =$

$8 \cdot 9 =$

$8 \cdot 9 =$

$3 \cdot 10 =$

$4 \cdot 6 =$

$1 \cdot 10 =$

$12 \cdot 7 =$

$4 \cdot 9 =$

$11 \cdot 5 =$

$4 \cdot 9 =$

$11 \cdot 8 =$

$12 \cdot 10 =$

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

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$8 \cdot 9 =$

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$3 \cdot 10 =$

$4 \cdot 6 =$

$1 \cdot 10 =$

$12 \cdot 7 =$

$4 \cdot 9 =$

$11 \cdot 5 =$

$4 \cdot 9 =$

$11 \cdot 8 =$

$12 \cdot 10 =$

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$4 \cdot 6 =$

$1 \cdot 10 =$

$12 \cdot 7 =$

$4 \cdot 9 =$

$11 \cdot 5 =$

$4 \cdot 9 =$

$11 \cdot 8 =$

$12 \cdot 10 =$

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

$5 \cdot 4 =$	$10 \cdot 11 =$	$10 \cdot 1 =$
$2 \cdot 1 =$	$3 \cdot 4 =$	$12 \cdot 4 =$
$11 \cdot 10 =$	$10 \cdot 9 =$	$1 \cdot 4 =$
$7 \cdot 8 =$	$1 \cdot 11 =$	$10 \cdot 1 =$

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

$5 \cdot 4 =$	$10 \cdot 11 =$	$10 \cdot 1 =$
$2 \cdot 1 =$	$3 \cdot 4 =$	$12 \cdot 4 =$
$11 \cdot 10 =$	$10 \cdot 9 =$	$1 \cdot 4 =$
$7 \cdot 8 =$	$1 \cdot 11 =$	$10 \cdot 1 =$

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

$5 \cdot 4 =$	$10 \cdot 11 =$	$10 \cdot 1 =$
$2 \cdot 1 =$	$3 \cdot 4 =$	$12 \cdot 4 =$
$11 \cdot 10 =$	$10 \cdot 9 =$	$1 \cdot 4 =$
$7 \cdot 8 =$	$1 \cdot 11 =$	$10 \cdot 1 =$

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

$8 \cdot 10 =$

$11 \cdot 9 =$

$2 \cdot 9 =$

$8 \cdot 4 =$

$9 \cdot 1 =$

$2 \cdot 1 =$

$7 \cdot 1 =$

$10 \cdot 4 =$

$11 \cdot 7 =$

$9 \cdot 3 =$

$11 \cdot 9 =$

$4 \cdot 12 =$

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

$8 \cdot 10 =$

$11 \cdot 9 =$

$2 \cdot 9 =$

$8 \cdot 4 =$

$9 \cdot 1 =$

$2 \cdot 1 =$

$7 \cdot 1 =$

$10 \cdot 4 =$

$11 \cdot 7 =$

$9 \cdot 3 =$

$11 \cdot 9 =$

$4 \cdot 12 =$

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

$8 \cdot 10 =$

$11 \cdot 9 =$

$2 \cdot 9 =$

$8 \cdot 4 =$

$9 \cdot 1 =$

$2 \cdot 1 =$

$7 \cdot 1 =$

$10 \cdot 4 =$

$11 \cdot 7 =$

$9 \cdot 3 =$

$11 \cdot 9 =$

$4 \cdot 12 =$

Multiply the following special fractions. Remember to simplify your answers.

1) $\frac{3}{4} \cdot 8$

2) $\frac{2}{3} \cdot 6$

3) $\frac{4}{5} \cdot 10$

4) $\frac{5}{7} \cdot 7$

Multiply the following special fractions. Remember to simplify your answers.

1) $\frac{3}{4} \cdot 8$

2) $\frac{2}{3} \cdot 6$

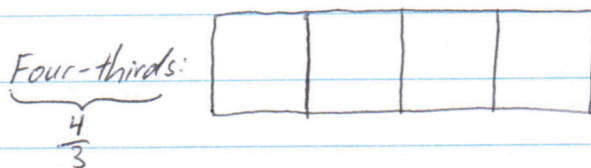
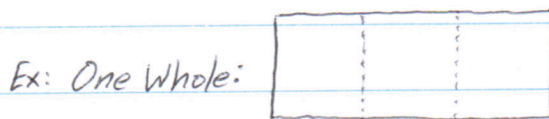
3) $\frac{4}{5} \cdot 10$

4) $\frac{5}{7} \cdot 7$

Whole-Part Conversion and Fractions of Collections

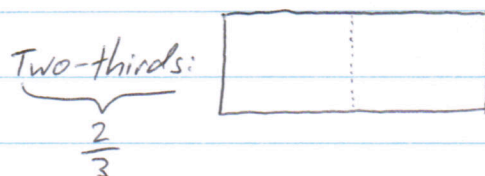
Section → Whole-to-Part

In real life, we sometimes get a whole pizza and need to find a part of it.



Section → Part-to-Whole

In real life, we sometimes get part of a pizza and need to find the whole thing.



Section → Fractions of Collections

To find fractions of a bunch of objects, we must remember that "of" means "multiply."

Ex: Find two-thirds of the following collection of apples:



$$\frac{2}{3} \text{ of } 6 = \frac{2}{3} \cdot 6 = \frac{2}{3} \cdot \frac{6}{1} = \frac{12}{3} = \boxed{4 \text{ apples}}$$

Given a whole pizza, draw the fraction.

1)

One Whole:



One-Fourth:

2) One Whole:



Three-Halves:

Given the fraction, draw the whole pizza.

3) One Whole:

Four-Fifths:



4) One Whole:

Five-Fourths:



For each problem, find the fraction of the collection.

5) Find one-fourth of the following collection of apples:



6) Find one-third of the following collection of cups:



7) Find three-fifths of the following collection of paper clips:



8) Find two-thirds of the following collection of basketballs:



9) Find one-half of the following collection of laptops:



10) Find three-fourths of the following collection of pencils:



11) Find three-halves of the following collection of books:



12) Find two-thirds of the following collection of water bottles:



13) Find one-half of the following collection of oranges:

