Objectives:

- Students will divide positive integers from the multiplication table without remainders, as evidenced by them passing one-minute quizzes.
- Students will multiply multi-digit whole numbers, as evidenced by them completing a warm-up worksheet where they do so.
- Students will multiply multi-digit decimals, as evidenced by them completing a homework assignment where they do so.

Student Materials on Desk Corner:

- Homework #3-12
- Homework Checker
- Warm-up & Notes Checker

Student Materials for Class:

- Homework Log
- Binder Paper
- Pencils

Teacher Materials:

- "Minute Quiz 3-13" for each student
- "Warm-up 3-13" for each student
- "Unit Calendar" transparency
- Lecture Notes for Lesson 3-13
- "Homework #3-13" handout for each student

Homework:

- Homework #3-13
- ALEKS

Time	Activity
10 min	**MINUTE QUIZ AND ATTENDANCE** **Minute Quiz and Warm-up** When the bell rings, quickly go around and put the **minute quiz** on each student's desk, face down. 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. After the minute is over, have a student collect the minute quizzes and give them to the teacher's aide (TA) to grade. **Attendance, Collect HW, and Warm-up Check** While students work on the warm-up, take **attendance** and have the TA collect **homework** & stamp homework checkers. At the end of the allotted time, go around and stamp the students' warm-up & notes **checkers**.
5 min	**ALEKS GRADE UPDATE** Explain to students: Keeping track of how much time you've put into ALEKS has been really difficult this semester because you had to subtract the number of hours you had first semester. So, I decided to take all the time that students had for the second semester, turn it into extra credit for homework, and then reset everyone's time. This helped a bunch of people's grades! Yay! The grading period ends next Friday, and by then, you need one hour in ALEKS.
25 min	**LESSON** **Introduction** Put up the unit calendar transparency and show students where they are in the unit. Remind students that we've been talking about the four operations: addition, subtraction, multiplication, and division. Earlier this week, we saw how to add decimals. Last lesson, we saw how to subtract decimals. Today, we will learn how to multiply decimals. **Notes** Teach the lesson using the notes. Once students are finished, stamp their warm-up & notes checkers.
10 min	**CLASSWORK** Give students the homework assignment as their classwork. They must do problems 1, 3, 5 before

	they may work on ALEKS.
25 min	**ALEKS** Groups of students should be sent to get laptops for **ALEKS**. Remind students that when returning the laptops, they must first get them checked by you or the TA. Use this student work time to **return graded homework**.
5 min	**CLEAN UP** Students check the laptops with the teacher or the TA before putting them away. Then, they pack up, sit in their seats, and wait to be dismissed.

Numeracy
Minute Quiz 3-13 A

Name:
Date: Period:

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

60 ÷ 5	21 ÷ 7	7 ÷ 1
12 ÷ 2	4 ÷ 2	2 ÷ 2
45 ÷ 5	30 ÷ 10	44 ÷ 11
27 ÷ 9	60 ÷ 10	63 ÷ 9

Numeracy
Minute Quiz 3-13 A

Name:
Date: Period:

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

60 ÷ 5	21 ÷ 7	7 ÷ 1
12 ÷ 2	4 ÷ 2	2 ÷ 2
45 ÷ 5	30 ÷ 10	44 ÷ 11
27 ÷ 9	60 ÷ 10	63 ÷ 9

Numeracy
Minute Quiz 3-13 A

Name:
Date: Period:

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

60 ÷ 5	21 ÷ 7	7 ÷ 1
12 ÷ 2	4 ÷ 2	2 ÷ 2
45 ÷ 5	30 ÷ 10	44 ÷ 11
27 ÷ 9	60 ÷ 10	63 ÷ 9

Numeracy
Minute Quiz 3-13 B

Name:
Date: Period:

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

80 ÷ 8	56 ÷ 8	56 ÷ 8
44 ÷ 11	48 ÷ 12	20 ÷ 10
60 ÷ 5	72 ÷ 9	18 ÷ 6
36 ÷ 12	24 ÷ 2	40 ÷ 10

Numeracy
Minute Quiz 3-13 B

Name:
Date: Period:

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

80 ÷ 8	56 ÷ 8	56 ÷ 8
44 ÷ 11	48 ÷ 12	20 ÷ 10
60 ÷ 5	72 ÷ 9	18 ÷ 6
36 ÷ 12	24 ÷ 2	40 ÷ 10

Numeracy
Minute Quiz 3-13 B

Name:
Date: Period:

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

80 ÷ 8	56 ÷ 8	56 ÷ 8
44 ÷ 11	48 ÷ 12	20 ÷ 10
60 ÷ 5	72 ÷ 9	18 ÷ 6
36 ÷ 12	24 ÷ 2	40 ÷ 10

Numeracy
Minute Quiz 3-13 C

Name:
Date: Period:

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

33 ÷ 11	54 ÷ 6	88 ÷ 8
132 ÷ 12	80 ÷ 10	5 ÷ 1
72 ÷ 8	60 ÷ 6	60 ÷ 10
28 ÷ 4	36 ÷ 4	2 ÷ 2

Numeracy
Minute Quiz 3-13 C

Name:
Date: Period:

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

33 ÷ 11	54 ÷ 6	88 ÷ 8
132 ÷ 12	80 ÷ 10	5 ÷ 1
72 ÷ 8	60 ÷ 6	60 ÷ 10
28 ÷ 4	36 ÷ 4	2 ÷ 2

Numeracy
Minute Quiz 3-13 C

Name:
Date: Period:

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

33 ÷ 11	54 ÷ 6	88 ÷ 8
132 ÷ 12	80 ÷ 10	5 ÷ 1
72 ÷ 8	60 ÷ 6	60 ÷ 10
28 ÷ 4	36 ÷ 4	2 ÷ 2

Numeracy
Warm-up 3-13

Name:
Date: Period:

Evaluate each multiplication problem.

1) 23 4

2) 23 5

3) 23 45

4) 123 4

5) 123 5

6) 123 45

7) 1234 56

8) 123 456

Numeracy
Warm-up 3-13

Name:
Date: Period:

Evaluate each multiplication problem.

1) 23 4

2) 23 5

3) 23 45

4) 123 4

5) 123 5

6) 123 45

7) 1234 56

8) 123 456

Numeracy
Lesson 3-13

Tom Wong
3/5/09

Multiplying Decimals

Section → Vocabulary and Steps

12.345
(decimal point; 3 decimal places)

To multiply two decimal numbers,

Step 1: Ignore the decimal points and multiply as if they were whole numbers.

Step 2: Count the number of decimal places in the two decimals. Add them up ("total").

Step 3: Put the decimal point in the answer so that it has "total" decimal places.

Section → Examples

Ex: $1.2 \cdot 0.3 = ?$

$$\begin{array}{r} 1.2 \ (1) \\ \times \ .3 \ (1) \\ \hline .36 \ (2) \end{array}$$

Ex: $0.25 \cdot 4 = ?$

$$\begin{array}{r} 0.25 \ (2) \\ \times \ \ 4 \ (0) \\ \hline 1.00 \ (2) \end{array}$$

Ex: $.137 \cdot .23 = ?$

$$\begin{array}{r} .137 \ (3) \\ \times \ .23 \ (2) \\ \hline 411 \\ +2740 \\ \hline .03151 \ (5) \end{array}$$

Ex: $.245 \cdot .16 = ?$

$$\begin{array}{r} .245 \ (3) \\ \times \ .16 \ (2) \\ \hline 1470 \\ +2450 \\ \hline .03920 \ (5) \end{array}$$

Numeracy Name:
Homework #3-13 – Multiplying Decimals Date: Period:

Evaluate the following decimal multiplication problems.

1) 2.5 3

2) 3.2 0.4

3) 0.12 3

4) 1.36 0.2

5) 3.5 2.4

6) 2.13 4.5

7) 72.3 1.5

8) 0.532 0.24

9) 1.23 4.56

10) 23.43 2.1