Objectives:

- Students will divide positive integers from the multiplication table without remainders, as evidenced by them passing one-minute quizzes.
- Students will shift the decimal point of decimal numbers to the right, as evidenced by them completing a warm-up worksheet where they do so.
- Students will divide decimals and whole numbers by decimals, as evidenced by them completing a homework assignment where they do so.

Student Materials on Desk Corner:

- Homework #3-14
- Homework Checker
- Warm-up & Notes Checker

Student Materials for Class:

- Homework Log
- Binder Paper
- Pencils

Teacher Materials:

- "Minute Quiz 3-15" for each student
- "Warm-up 3-15" for each student
- "Unit Calendar" transparency
- Lecture Notes for Lesson 3-15
- "Homework #3-15" handout for each student

Homework:

- Homework #3-15
- 1 hour of ALEKS due Friday (end of the grading period)

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**.
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. Last week, we learned how to add, subtract, and multiply decimals. Today, we will learn how to divide decimals. **Notes** Teach the lesson using the notes. Afterwards, stamp students' warm-up & notes checkers.
35 min	**CLASSWORK & ALEKS** Give students the homework assignment as their **classwork**. They must do problems 1, 3, 5 before they may work on **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 3-15 A

Name:
Date: Period:

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

22 ÷ 2 =	10 ÷ 5 =	11 ÷ 1 =
121 ÷ 11 =	24 ÷ 2 =	33 ÷ 11 =
24 ÷ 2 =	48 ÷ 12 =	9 ÷ 1 =
18 ÷ 6 =	30 ÷ 10 =	42 ÷ 6 =

Numeracy
Minute Quiz 3-15 A

Name:
Date: Period:

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

22 ÷ 2 =	10 ÷ 5 =	11 ÷ 1 =
121 ÷ 11 =	24 ÷ 2 =	33 ÷ 11 =
24 ÷ 2 =	48 ÷ 12 =	9 ÷ 1 =
18 ÷ 6 =	30 ÷ 10 =	42 ÷ 6 =

Numeracy
Minute Quiz 3-15 A

Name:
Date: Period:

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

22 ÷ 2 =	10 ÷ 5 =	11 ÷ 1 =
121 ÷ 11 =	24 ÷ 2 =	33 ÷ 11 =
24 ÷ 2 =	48 ÷ 12 =	9 ÷ 1 =
18 ÷ 6 =	30 ÷ 10 =	42 ÷ 6 =

Numeracy
Minute Quiz 3-15 B

Name:
Date: Period:

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

84 ÷ 12 =	60 ÷ 6 =	14 ÷ 2 =
24 ÷ 8 =	45 ÷ 9 =	18 ÷ 2 =
4 ÷ 2 =	21 ÷ 3 =	4 ÷ 4 =
120 ÷ 10 =	12 ÷ 4 =	30 ÷ 3 =

Numeracy
Minute Quiz 3-15 B

Name:
Date: Period:

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

84 ÷ 12 =	60 ÷ 6 =	14 ÷ 2 =
24 ÷ 8 =	45 ÷ 9 =	18 ÷ 2 =
4 ÷ 2 =	21 ÷ 3 =	4 ÷ 4 =
120 ÷ 10 =	12 ÷ 4 =	30 ÷ 3 =

Numeracy
Minute Quiz 3-15 B

Name:
Date: Period:

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

84 ÷ 12 =	60 ÷ 6 =	14 ÷ 2 =
24 ÷ 8 =	45 ÷ 9 =	18 ÷ 2 =
4 ÷ 2 =	21 ÷ 3 =	4 ÷ 4 =
120 ÷ 10 =	12 ÷ 4 =	30 ÷ 3 =

Numeracy
Minute Quiz 3-15 C

Name:
Date: Period:

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

120 ÷ 10 =	48 ÷ 4 =	21 ÷ 3 =
64 ÷ 8 =	16 ÷ 4 =	72 ÷ 9 =
2 ÷ 1 =	55 ÷ 5 =	12 ÷ 1 =
16 ÷ 8 =	12 ÷ 1 =	25 ÷ 5 =

Numeracy
Minute Quiz 3-15 C

Name:
Date: Period:

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

120 ÷ 10 =	48 ÷ 4 =	21 ÷ 3 =
64 ÷ 8 =	16 ÷ 4 =	72 ÷ 9 =
2 ÷ 1 =	55 ÷ 5 =	12 ÷ 1 =
16 ÷ 8 =	12 ÷ 1 =	25 ÷ 5 =

Numeracy
Minute Quiz 3-15 C

Name:
Date: Period:

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

120 ÷ 10 =	48 ÷ 4 =	21 ÷ 3 =
64 ÷ 8 =	16 ÷ 4 =	72 ÷ 9 =
2 ÷ 1 =	55 ÷ 5 =	12 ÷ 1 =
16 ÷ 8 =	12 ÷ 1 =	25 ÷ 5 =

Numeracy
Warm-up 3-15

Name:
Date: Period:

For each problem, shift (move) the decimal point to the right.

Number	Shift Right By	Answer
1.234	2	123.4
82.392	1	
0.023	3	
3.14159	5	
793.8	2	
9.0	1	
2.718	4	
25.8	3	
68.359	1	
9.3	2	

Number	Shift Right By	Answer
56.78	3	56780.
8.203	2	
7.246	4	
0.102	1	
1.001	3	
9	1	
6.57	2	
0.0034	3	
4.2	4	
0.3	2	

Numeracy
Warm-up 3-15

Name:
Date: Period:

For each problem, shift (move) the decimal point to the right.

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1.234	2	123.4
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Number	Shift Right By	Answer
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0.102	1	
1.001	3	
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6.57	2	
0.0034	3	
4.2	4	
0.3	2	

Numeracy
Lesson 3-15

Tom Wong
3/7/09

Dividing by Decimals

Section → Introduction and Steps

Last time, we divided decimals by whole numbers (type 1).

Today, we will divide decimals and whole numbers by decimals (type 2).

Step 1: Shift the decimal points of both numbers until we are dividing by a whole number.

Step 2: Evaluate this type 1 problem.

Section → Examples

Ex: $5.39 \div 1.1 = ?$

$53.9 \div 11 = ?$

$$\begin{array}{r} 4.9 \\ 11\overline{)53.9} \\ -44\downarrow \\ \hline 99 \\ -99 \\ \hline 0 \end{array}$$

Ex: $2.76 \div .12 = ?$

$276 \div 12 = ?$

$$\begin{array}{r} 23 \\ 12\overline{)276} \\ -24\downarrow \\ \hline 36 \\ -36 \\ \hline 0 \end{array}$$

Ex: $72 \div .9 = ?$

$720 \div 9 = ?$

$$\begin{array}{r} 80 \\ 9\overline{)720} \\ -72\downarrow \\ \hline 00 \\ -0 \\ \hline 0 \end{array}$$

Ex: $56 \div .07 = ?$

$5600 \div 7 = ?$

$$\begin{array}{r} 800 \\ 7\overline{)5600} \\ -56\downarrow \\ \hline 00 \\ -0\downarrow \\ \hline 00 \\ -0 \\ \hline 0 \end{array}$$

Numeracy Name:
Homework #3-15 – Dividing by Decimals Date: Period:

For each problem, divide the decimal or whole number by the decimal.

1) 2.8 ÷ 0.4

2) 32 ÷ 0.4

3) 16.8 ÷ 1.4

4) 192 ÷ 0.16

5) 1.476 ÷ 3.6

6) 2408 ÷ 8.6

7) 3.999 ÷ 0.093

8) 9604 ÷ 9.8

9) 14.985 ÷ 0.111

10) 50944 ÷ 19.9