1. Draw place value disks on the place value chart to solve. Show each step using the standard algorithm.

$4.23 \div 3 = \underline{\textbf{1.41}}$

4.23 is divided into 3 equal groups. There is 1.41 in each group.

Ones	Tenths	Hundredths

$$\begin{array}{r} 1.\ 4\ 1 \\ 3\overline{)4.\ 2\ 3} \\ -\ 3 \\ \hline 1\ 2 \\ -\ 1\ 2 \\ \hline 0\ 3 \\ -\ \ 3 \\ \hline 0 \end{array}$$

When I share 4 ones equally with 3 groups, there is 1 one in each group and 1 one remaining.

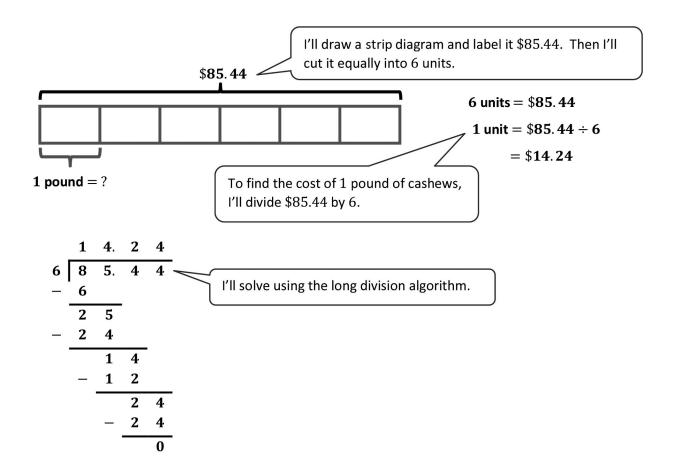In each group, there is 1 one 4 tenths 1 hundredth or 1.41.

2. Solve 15.72 ÷ 4 using the standard algorithm.

15.72 is divided into 4 equal groups. There is 3.93 in each group.

$$\begin{array}{r} 3.\ 9\ 3 \\ 4\overline{)1\ 5.\ 7\ 2} \\ -\ 1\ 2 \\ \hline 3\ 7 \\ -\ 3\ 6 \\ \hline 1\ 2 \\ -\ 1\ 2 \\ \hline 0 \end{array}$$

When completing the division, I need to be sure to line up the place value units carefully—the tens with the tens, the ones with the ones, etc.

As I work, I'm visualizing the place value chart and thinking out loud. "We had 15 ones and shared 12 of them. 3 ones remain. I can change those 3 ones for 30 tenths, which combined with the 7 tenths in the whole, makes 37 tenths. Now I need to share 37 tenths equally with 4 groups. Each group gets 9 tenths."

Lesson 13: Divide decimals with a remainder using place value understanding and relate to a written method.

59

EUREKA MATH® TEKS EDITION

© Great Minds PBC TEKS Edition | greatminds.org/Texas

3. Mr. Huynh paid $85.44 for 6 pounds of cashews. What's the cost of 1 pound of cashews?

I'll draw a strip diagram and label it $85.44. Then I'll cut it equally into 6 units.

$85.44

6 units = $85.44

1 unit = $85.44 ÷ 6

= $14.24

1 pound = ?

To find the cost of 1 pound of cashews, I'll divide $85.44 by 6.

$$
\begin{array}{r}
1\ 4.\ 2\ 4 \\
6\,\overline{\smash{\big)}\,8\ 5.\ 4\ 4} \\
-\ 6 \\
\hline
2\ 5 \\
-\ 2\ 4 \\
\hline
1\ 4 \\
-\ 1\ 2 \\
\hline
2\ 4 \\
-\ 2\ 4 \\
\hline
0
\end{array}
$$

I'll solve using the long division algorithm.

The cost of 1 pound of cashews is $14.24.

Lesson 13: Divide decimals with a remainder using place value understanding and relate to a written method.

EUREKA MATH®
TEKS EDITION

Name _____   Date _____

1. Draw place value disks on the place value chart to solve. Show each step using the standard algorithm.

    a.   5.25 ÷ 3 = _____

Ones	Tenths	Hundredths

$$3\overline{)5.25}$$

    b.   5.36 ÷ 4 = _____

Ones	Tenths	Hundredths

$$4\overline{)5.36}$$

Lesson 13: Divide decimals with a remainder using place value understanding and relate to a written method.

61

EUREKA MATH
TEKS EDITION

© Great Minds PBC TEKS Edition | greatminds.org/Texas

2. Solve using the standard algorithm.

a. 0.64 ÷ 4 = _____	b. 6.45 ÷ 5 = _____	c. 16.44 ÷ 6 = _____

3. Mrs. Mayuko paid $40.68 for 3 kg of shrimp. What's the cost of 1 kilogram of shrimp?

4. The total weight of 6 pieces of butter and a bag of sugar is 3.8 lb. If the weight of the bag of sugar is 1.4 lb, what is the weight of each piece of butter?

Lesson 13:   Divide decimals with a remainder using place value understanding and relate to a written method.

EUREKA MATH®
TEKS EDITION