

Decimal Concepts; Coordinate Grids

In Unit 4 students extend their understanding of the base-ten place-value system to include decimals. In Lessons 4-1 to 4-5 they use familiar patterns in the place-value chart to examine relationships among digits to the right of the decimal point in the tenths, hundredths, and thousandths places. Students practice reading and writing decimals in words and numerals, they represent decimals on grids and on number lines, and they use place-value understanding to compare and order decimals. They further develop their understanding of *how* and *why* we round numbers by investigating real-world situations in which rounding decimals would be appropriate and necessary.

In Lessons 4-6 and 4-7 students are introduced to the first quadrant of the coordinate grid. They play a game, *Hidden Treasure*, to practice plotting points and to think about distances between points on the grid. In Lessons 4-8 through 4-10 students apply their knowledge of the coordinate grid system. They connect points to form shapes and study how operations on coordinates change the shapes. They also express data sets as lists of ordered pairs, plot the points on a coordinate grid, and use the graph to extend the patterns and solve problems.

Example: *The table below shows Kit's age and his brother Tommy's age at different points in their lives.*

Kit's Age (x)	Tommy's Age (y)
3	0
4	1
6	3
8	5
9	6

Ordered pairs:

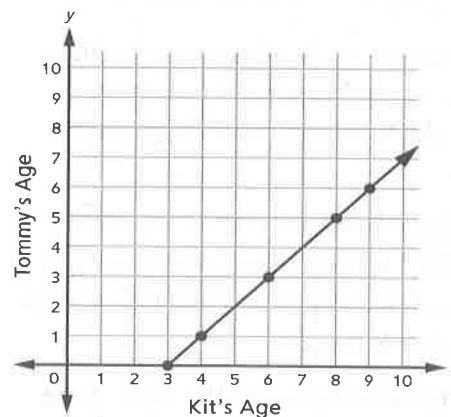
(3, 0)

(4, 1)

(6, 3)

(8, 5)

(9, 6)



What is Tommy's age when Kit's age is 10?

Tommy's age is 7.

In Lessons 4-11 through 4-14 students deepen their understanding of decimals as they build on concepts from earlier in the unit to add and subtract decimals using a variety of strategies and models. They review and apply whole-number algorithms for addition and subtraction to include decimal addition and subtraction.

Please keep this Family Letter for reference as your child works through Unit 4.

Vocabulary

Important terms in Unit 4:

algorithm A set of step-by-step instructions for doing something, such as carrying out a computation or solving a problem.

axis of a coordinate grid (plural: axes) Either of the two number lines that intersect, usually at right angles, to form a coordinate grid.

column addition An addition algorithm in which the addends' digits are first added in each place-value column separately, and then 10-for-1 trades are made until each column has only one digit. Lines may be drawn to separate the place-value columns.

coordinate grid A reference frame for locating points in a plane using *ordered pairs* of numbers, or *coordinates*. A coordinate grid is formed by two number lines that intersect at their zero points and form right angles.

coordinates The numbers in an *ordered pair*.

counting-up subtraction A subtraction strategy in which a difference is found by counting or adding up from the smaller number to the larger number.

decimal (1) In *Everyday Mathematics*, a number written in standard base-10 notation containing a decimal point, such as 2.54. (2) Any number written in standard base-10 notation.

hundredths The second place to the right of the decimal point, representing $\frac{1}{100}$ s.

ordered pair Two numbers that are used to locate a point on a rectangular coordinate grid. The first number gives the position in the direction of the horizontal axis, while the second number

gives the position in the direction of the vertical axis. The numbers in an ordered pair are called coordinates. Ordered pairs are usually written in parentheses: (5, 3).

origin The point (0, 0) where the two axes of a coordinate grid meet.

partial-sums addition An addition algorithm in which separate sums are computed for each place value of the numbers and then added to get a final sum.

rounding Adjusting a number to make it easier to interpret or work with, or to make it better reflect the level of precision of the data.

tenths The first place to the right of the decimal point, representing $\frac{1}{10}$ s.

thousandths The third place to the right of the decimal point, representing $\frac{1}{1,000}$ s.

trade-first subtraction A subtraction algorithm in which all necessary trades between places in the numbers are made before any subtractions are carried out. Some people favor this algorithm because they can concentrate on one thing at a time.

U.S. traditional addition An addition method in which computation starts at the right, digits are added column by column, and numbers are carried to the next larger place as necessary.

U.S. traditional subtraction A subtraction method in which computation starts at the right, subtractions are made column by column, and trades are made as necessary.

Do-Anytime Activities

To work with your child on the key concepts in this unit, try some of these activities:

1. Help your child find decimals in the real world. For example, amounts of money are almost always written in dollars and cents and include decimal points to separate whole dollars from cents.

- Think of simple real-world decimal addition and subtraction problems and have your child solve them. For example: *This package of meat weighs 2.09 pounds. This package weighs 2.54 pounds. What's the difference in their weights?*
- Practice using maps that contain a grid with your child. Have him or her use the grid and index to find different locations on the map.

Building Skills through Games

In Unit 4 your child will play games to practice working with decimal place values, and to compare, add, and subtract decimals. He or she will also plot points on a coordinate grid. Detailed instructions for each game are in the *Student Reference Book*. Many of these games can be played at home with materials you likely already have; gameboards can be copied for home use.

Decimal Top-It See *Student Reference Book*, pages 296 and 297. Two to four players need a copy of a place-value mat from *Math Masters*, page TA25; number cards 0–9 (4 of each); and a 6-sided die for this game. *Decimal Top-It* provides practice comparing decimals through thousandths.

Hidden Treasure See *Student Reference Book*, page 311. Two players need copies of the

gameboard from *Math Masters*, page G26, two pencils, and one red pen or crayon for this game. *Hidden Treasure* provides practice plotting ordered pairs.

Over and Up Squares See *Student Reference Book*, page 317. Two players need a copy of the gameboard from *Math Masters*, page G25; two 6-sided dice; and two different colored pencils for this game. *Over and Up Squares* provides practice plotting ordered pairs.

Spend and Save See *Student Reference Book*, page 323. Two players need copies of the record sheet from *Math Masters*, page G27; number cards 0–9 (4 of each); one coin; and one counter for this game. *Spend and Save* provides practice adding and subtracting money amounts with decimals.

As You Help Your Child with Homework

As your child brings assignments home, you might want to go over the instructions together, clarifying them as necessary. The answers listed below will guide you through this unit's Home Links.

Home Link 4-1

- two and five hundred ninety-eight thousandths
 - twenty-one hundredths
 - one and six thousandths
- 4a. 3.9 b. 0.9 5a. 0.39 b. 0.09
6a. 0.639 b. 0.009 7. 0.853 8. 6.241
9. 67,432 10. 38,232

Home Link 4-2

- 1.-2. Answers vary. 3. 21 R7 4. 205 R14

Home Link 4-3

- 1.-4. Answers vary. 5. 9.570 6. 3.624
7. 0.589 8. 2.371 9. 6 10. 8

Unit 4: Family Letter, *continued*

Home Link 4-4

1. $<$, $>$, $<$, $<$, $>$ 2. Charity

3a. 0.378 0.547 0.72 0.804 0.9

3b. 0.098 0.59 0.6 0.860 0.92

4a. 0.92 b. Answers vary.

Home Link 4-5



2. 0.2; 0.8; 8.1; 10.0; 23.6; 61.8; 100.8; 115.8; 122.0; 132.8

3. 8,000 4. 2,300,000 5. 10^2 6. 10^3

Home Link 4-6

2a. (15, 11) b. (12, 6) c. (17, 7) d. (8, 9)

4. 7.053 5. 4.159

Home Link 4-7

1. Put X by first and third expressions.

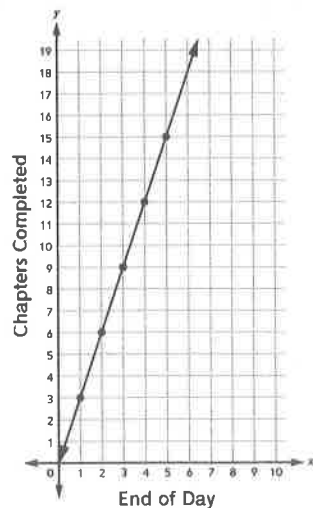
2. Sample answer: $(0 * 1) + (6 * 0.1) + (0 * 0.01) + (5 * 0.001)$

Home Link 4-8

3. $>$ 4. $<$ 5. $=$ 6. $<$ 7. $=$ 8. $>$

Home Link 4-9

Ordered pairs: (1, 3); (2, 6); (3, 9); (4, 12); (5, 15)



1. Between days 1 and 2 2. 10 or 11

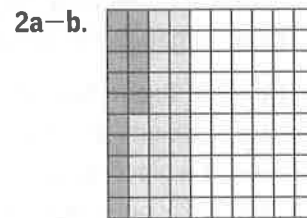
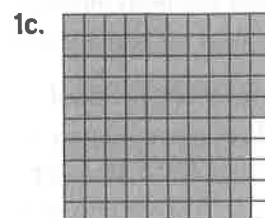
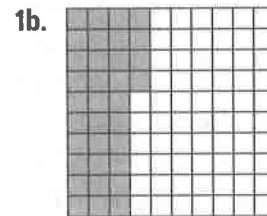
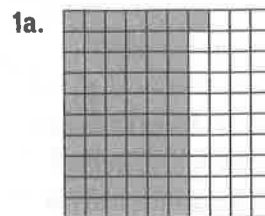
3. Sometime on the sixth day

5. 0.55 6. 3.97 7. 84.10 8. 0.01

Home Link 4-10

Sample answers: 6. $\frac{7}{2}$ 7. $2\frac{7}{4}$ 8. $8\frac{1}{3}$ 9. $\frac{20}{3}$

Home Link 4-11



1d. $0.61 + 0.34 = 0.95$ 2c. $0.4 - 0.15 = 0.25$

3. 837 4. 17,248 5. 72,512

Home Link 4-12

1. 11.7 2. 9.16 3. 19.05 4. 28.95

5. 54.66 6. 6 7. $\frac{11}{2}$, or $5\frac{1}{2}$ 8. $\frac{11}{5}$, or $2\frac{1}{5}$

Home Link 4-13

1. 6.7 2. 4.75 3. 10.92 4. 0.84 5. 1.63

6. 0.09 7. 0.9 8. 9 9. 0.009 10. 90 11. 0.09

Home Link 4-14

1. \$3.48 2. \$2.63 3. \$0.50 4. \$1.76

5. $47\frac{13}{17}$ 6. Answers vary.

Reading and Writing Decimals

Use the place-value chart below to complete Problems 1–8.



Ones 1s 1s	.	Tenths 0.1s $\frac{1}{10}$ s	Hundredths 0.01s $\frac{1}{100}$ s	Thousandths 0.001s $\frac{1}{1,000}$ s
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Write each decimal in words.

- ① 2.598 _____
- ② 0.21 _____
- ③ 1.006 _____

Write each decimal using numerals. Then write the value of 9 in each decimal.

- ④ a. three and nine tenths _____ b. 9 is worth _____
- ⑤ a. thirty-nine hundredths _____ b. 9 is worth _____
- ⑥ a. six hundred thirty-nine thousandths _____
- b. 9 is worth _____

Solve the place-value puzzles.

- ⑦ Use the clues to write the mystery number.

Write 3 in the thousandths place.

Write 8 in the tenths place.

Write 5 in the hundredths place.

Write 0 in the ones place.

- ⑧ Make the following changes to the number 2.614:

Make the 1 worth $\frac{1}{10}$ as much.

Make the 4 worth 10 times as much.

Make the 2 worth $\frac{1}{10}$ as much.

Make the 6 worth 10 times as much.

Practice

Make an estimate and solve using U.S. traditional multiplication.

⑨ _____
(estimate)

$$\begin{array}{r} 8, 4 2 9 \\ \times \quad \quad 8 \\ \hline \end{array}$$

⑩ _____
(estimate)

$$\begin{array}{r} 5 3 1 \\ \times \quad 7 2 \\ \hline \end{array}$$

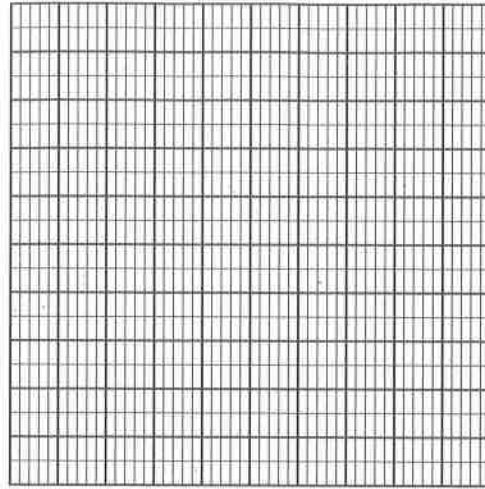
Representing Decimals

For Problems 1 and 2, use words, fractions, equivalent decimals, or other representations to write at least three names for each decimal in the name-collection box. Then shade the grid to show the decimal.



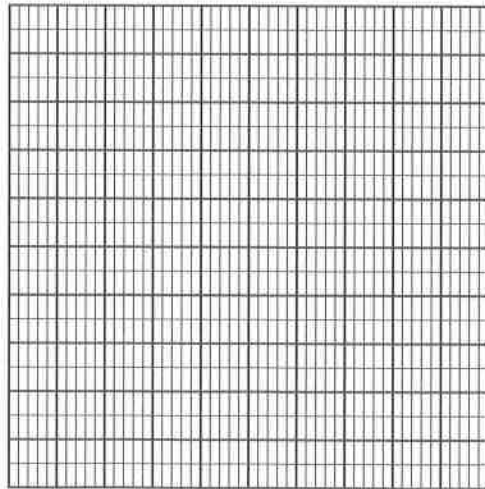
①

0.550



②

0.09



Practice

Make an estimate and solve. Show your work on the back of the page.

③ Estimate: _____

$$15 \overline{)322}$$

$$322 \div 15 \rightarrow \underline{\hspace{2cm}}$$

④ Estimate: _____

$$21 \overline{)4,319}$$

$$4,319 \div 21 \rightarrow \underline{\hspace{2cm}}$$

Representing Decimals in Expanded Form

Home Link 4-3

NAME _____

DATE _____

TIME _____

Numbers can be written in **standard notation** or **expanded form**. When numbers are written in expanded form, the value of each digit is clearly shown. The number 3.924 is written in standard notation. The examples below show 3.924 using different versions of expanded form.



- $3 + 0.9 + 0.02 + 0.004$
- 3 ones + 9 tenths + 2 hundredths + 4 thousandths
- $(3 * 1) + (9 * 0.1) + (2 * 0.01) + (4 * 0.001)$
- $(3 * 1) + (9 * \frac{1}{10}) + (2 * \frac{1}{100}) + (4 * \frac{1}{1,000})$

In Problems 1–4, represent each decimal using one version of expanded form.

- ① 0.571 _____
- ② 4.203 _____
- ③ 0.068 _____
- ④ 8.415 _____

In Problems 5–8 an expanded form of a decimal is given. Write the decimal in standard notation.

- ⑤ 9 ones + 5 tenths + 7 hundredths + 0 thousandths _____
- ⑥ $3 + 0.6 + 0.02 + 0.004$ _____
- ⑦ $(5 * \frac{1}{10}) + (8 * \frac{1}{100}) + (9 * \frac{1}{1,000})$ _____
- ⑧ $(2 * 1) + (3 * 0.1) + (7 * 0.01) + (1 * 0.001)$ _____

Practice

- ⑨ There 30 colored circles on a rug. $\frac{1}{5}$ of the circles are red. How many red circles are on the rug?
- ⑩ Jerome did a survey to find out his classmates' favorite sports. He found that $\frac{1}{3}$ of the 24 students in his class chose soccer as their favorite sport. How many students chose soccer?

Answer: _____ red circles

Answer: _____ students

Comparing and Ordering Decimals

Darryl and Charity are playing *Decimal Top-It*. Their record sheet is shown below.

Ones	.	Tenths	Hundredths	Thousandths



- ① Compare their decimals for each round and write $>$, $<$, or $=$ in the middle column. Use the place-value chart above to help you.

Round	Player 1 - Darryl	$>$, $<$, $=$	Player 2 - Charity
1	0.378		0.860
2	0.9		0.59
3	0.804		0.92
4	0.547		0.6
5	0.72		0.098

- ② Who won the most rounds? _____

- ③ a. Put Darryl's decimals in order from least to greatest.

- b. Put Charity's decimals in order from least to greatest.

- ④ a. What was the largest decimal of the whole game? _____

- b. How do you know?

Practice

Use the fractions below to complete Problems 5–7. Use each fraction only once.

$\frac{2}{3}$ $\frac{1}{4}$ $\frac{7}{8}$ $\frac{3}{4}$

⑤ $\frac{3}{8} + \underline{\hspace{1cm}} < 1$

⑥ $\underline{\hspace{1cm}} - \frac{1}{8} < 1$

⑦ $\underline{\hspace{1cm}} + \underline{\hspace{1cm}} > 1$

Rounding Decimals



- ① Mark each number on the number line. The first one is done for you.

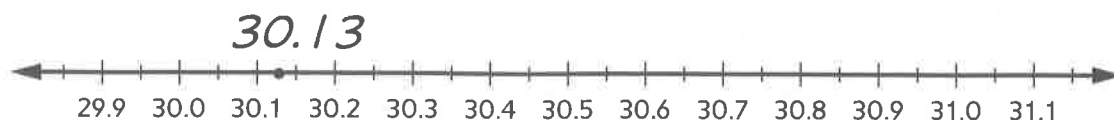
30.13

30.72

31.05

29.94

30.38



- ② Round the area of each country to the nearest tenth of a square mile.

Ten Smallest Countries		Area in Square Miles	Area Rounded to the Nearest Tenth of a Square Mile
1	Vatican City	0.17 mi ²	mi ²
2	Monaco	0.75 mi ²	mi ²
3	Nauru	8.11 mi ²	mi ²
4	Tuvalu	10.04 mi ²	mi ²
5	San Marino	23.63 mi ²	mi ²
6	Liechtenstein	61.78 mi ²	mi ²
7	St. Kitts and Nevis	100.77 mi ²	mi ²
8	Maldives	115.83 mi ²	mi ²
9	Malta	122.01 mi ²	mi ²
10	Grenada	132.82 mi ²	mi ²

Practice

Write the following expressions in standard notation.

③ $8 * 10^3 =$ _____

④ $23 * 10^5 =$ _____

Write the following numbers using exponential notation.

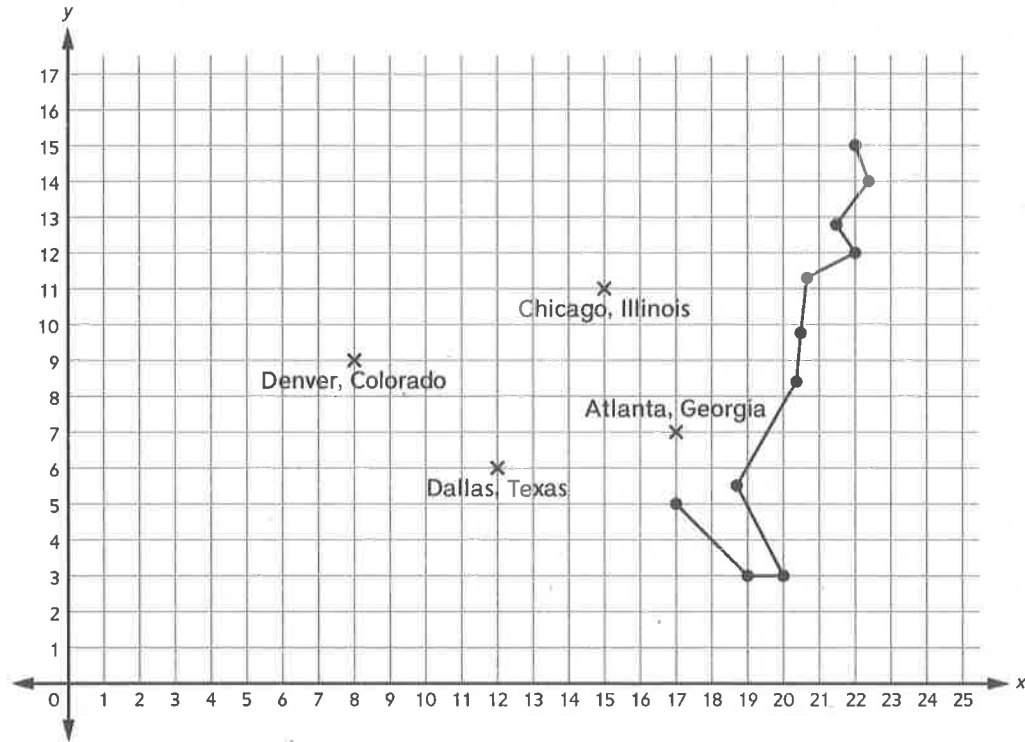
⑤ $400 = 4 *$ _____

⑥ $15,000 = 15 *$ _____

Plotting Points to Create an Outline Map



- ① a. Plot the following points on the grid: (21, 14) (17, 11) (17, 13) (15, 14) (2, 16) (1, 11) (2, 8) (3, 6) (7, 5) (11, 3) (13, 4)
- b. Connect all the points in the order listed. Then connect (13, 4) to (17, 5) and (21, 14) to (22, 15). You should see an outline map of the United States.



- ② Write the coordinates of each city.
- a. Chicago, Illinois _____
- b. Dallas, Texas _____
- c. Atlanta, Georgia _____
- d. Denver, Colorado _____
- ③ Plot each city on the grid and write the city name.
- a. Billings, Montana (7, 13)
- b. Salt Lake City, Utah (5, 10)

Practice

Use the clues to write the mystery number. Then read each decimal to someone at home.

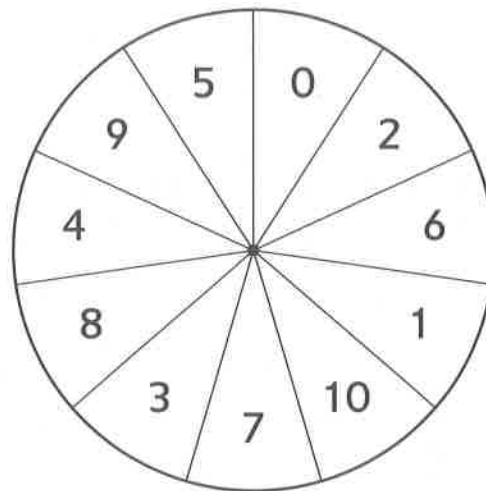
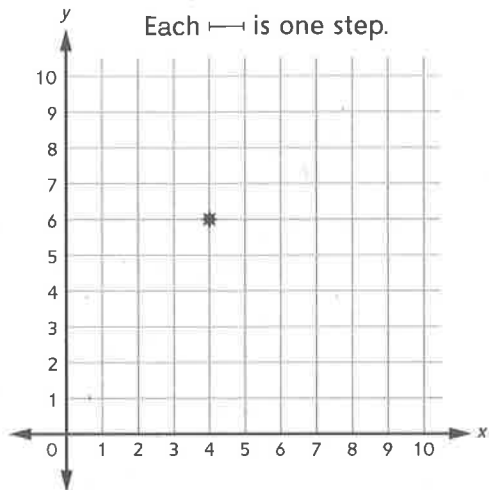
- ④ Write 0 in the tenths place.
Write 7 in the ones place.
Write 3 in the thousandths place.
Write 5 in the hundredths place.
- _____
- ⑤ Write 5 in the hundredths place.
Write 1 in the tenths place.
Write 4 in the ones place.
Write 9 in the thousandths place.
- _____

Treasure Steps

Play a coordinate grid game, *Treasure Steps*, with someone at home or by yourself.

The treasure is marked with a *.

Make a spinner with a paper clip and a pencil.



To play with a partner:

- Take turns. When it is your turn, spin. This is the first number in your ordered pair. Spin again. This is the second number in your ordered pair. Plot the point on the gameboard.
- Count the number of “steps” from your point to the treasure. Stay on the grid lines as you count. Record your ordered pair and the number of steps.
- After 5 rounds, find your total number of steps. The player with the smaller total wins.

To play by yourself:

The goal is to get as close to 30 steps as you can. Spin, plot your point, and count your steps as you would if you were playing with a partner. Record the ordered pairs and steps. After 5 rounds, find the total number of steps. How close did you get to 30?

Practice

- ① Put an **X** by the expressions that show 3.245 in expanded form.

3 ones + 2 tenths + 4 hundredths + 5 thousandths

$(3 * 1) + (2 * 0.01) + (4 * 0.001) + (5 * 0.0001)$

$(3 * 1) + \left(2 * \frac{1}{10}\right) + \left(4 * \frac{1}{100}\right) + \left(5 * \frac{1}{1,000}\right)$

- ② Write 0.605 in expanded form. Use any version of expanded form you wish.

Plotting Figures on a Coordinate Grid



- ① Plot any three points and connect them to make a triangle on the grid below. Label the points A , B , and C . List the coordinates of your points.

A : (_____, _____)

B : (_____, _____)

C : (_____, _____)

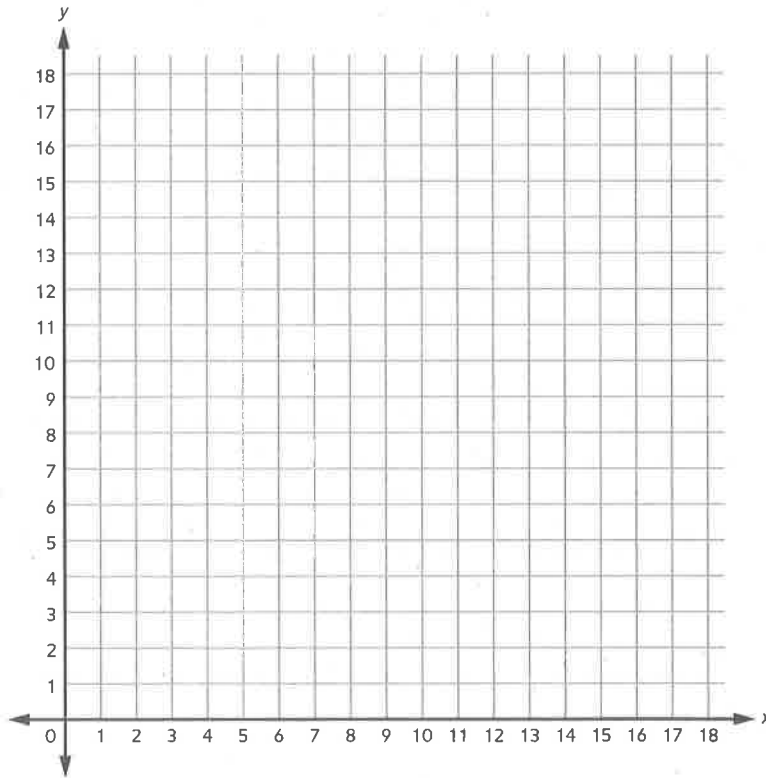
- ② Plot four points and connect them to make a quadrilateral on the grid below. The quadrilateral may overlap the triangle. Label the points as M , N , O , and P . List the coordinates of your points.

M : (_____, _____)

N : (_____, _____)

O : (_____, _____)

P : (_____, _____)



Practice

Write $<$, $>$, or $=$ to make true number sentences.

③ 0.3 _____ 0.25

④ 0.76 _____ 0.8

⑤ 0.1 _____ 0.10

⑥ 0.785 _____ 0.79

⑦ 4.03 _____ 4.030

⑧ 1.512 _____ 1.499

Solving Problems on a Coordinate Grid

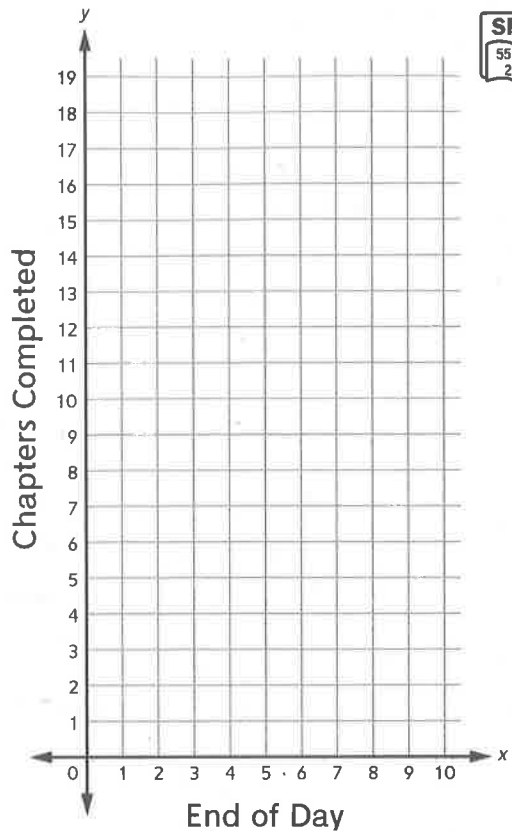
Clay reads the same amount of a book each day. The table below shows how many chapters of the book he has read at the end of each day.

Write the data from the table as ordered pairs. Plot the points on the grid and connect them in a line. Use the graph to answer the questions.

End of Day	Chapters Completed
1	3
2	6
3	9
4	12
5	15

Ordered pairs:

- (_____, _____)
 (_____, _____)
 (_____, _____)
 (_____, _____)
 (_____, _____)



- Between which two days did Clay finish reading Chapter 5 in the book?
Between days _____ and _____
- About how many chapters had Clay read half-way through the fourth day (Day $3\frac{1}{2}$)?

- If the book has 17 chapters, on what day would Clay complete the book?

- Explain how you found your answer to Problem 3.

Practice

Round the following numbers to the nearest hundredth.

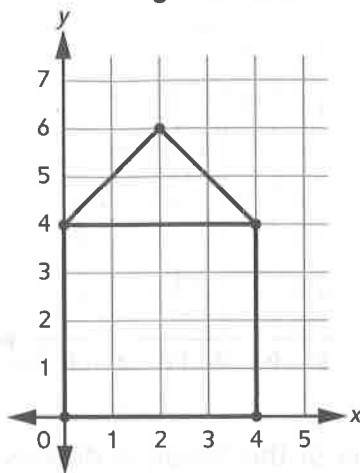
- | | |
|----------------|---------------|
| ⑤ 0.546 _____ | ⑥ 3.971 _____ |
| ⑦ 84.099 _____ | ⑧ 0.008 _____ |

Using a Coordinate Grid



Eva made a drawing of her house on a coordinate grid. She said that the real house looks like it is about twice as wide as it is high. Her brother said she should change her picture to look more like their real house.

Eva's Original Picture



- Write a rule that Eva can use to make the drawing of the house look more like her real house.

- Use your rule to write the new coordinates.

Original Drawing of the House	New Drawing of the House
(0, 4)	
(0, 0)	
(4, 0)	
(4, 4)	
(0, 4)	
(2, 6)	
(4, 4)	

Using a Coordinate Grid

(continued)

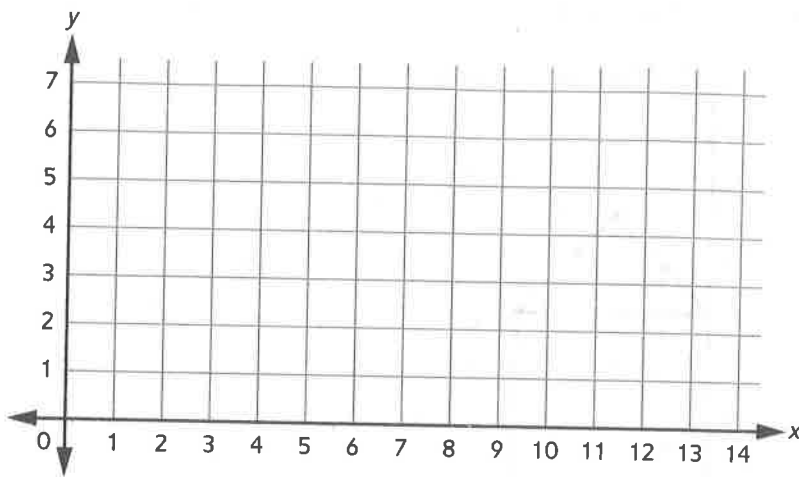
Home Link 4-10

NAME _____

DATE _____

TIME _____

- ③ Plot the new coordinates for the house on the coordinate grid below. Connect the points in the same order that you plot them.



- ④ Describe how the new drawing of the house is different from the original drawing.

- ⑤ What can Eva say to her brother to explain that her new drawing is twice as wide as it is high?

Practice

Rewrite each mixed number as a different fraction or mixed number with the same denominator.

⑥ $3\frac{1}{2} =$ _____

⑦ $3\frac{3}{4} =$ _____

⑧ $7\frac{4}{3} =$ _____

⑨ $6\frac{2}{3} =$ _____

Decimal Addition and Subtraction with Grids

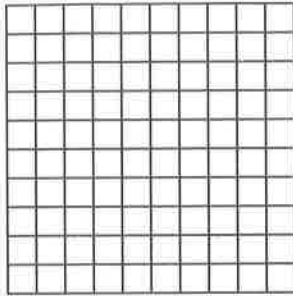


NAME _____

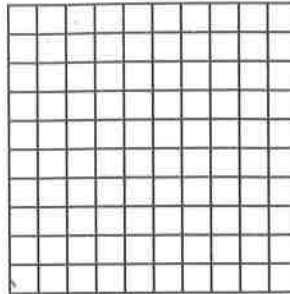
DATE _____

TIME _____

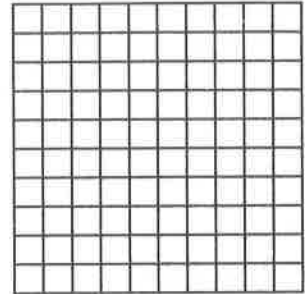
- ① a. Shade this grid to show 0.61.



- b. Shade this grid to show 0.34.



- c. Shade this grid to show $0.61 + 0.34$.

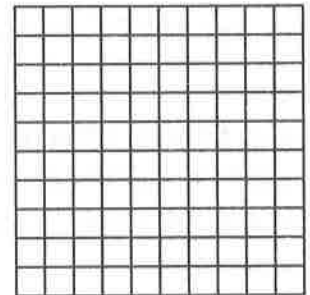


- d. Write an addition number sentence to represent what you did in Parts a–c.

- ② a. Shade the grid at the right to show 0.4.

- b. On top of the part that is already shaded, shade 0.15 darker, or cross out 0.15.

- c. Write a subtraction number sentence to show what you did.



Practice

Make an estimate. Then solve using U.S. traditional multiplication.

③ _____
(estimate)

$$\begin{array}{r} 27 \\ * 31 \\ \hline \end{array}$$

④ _____
(estimate)

$$\begin{array}{r} 308 \\ * 56 \\ \hline \end{array}$$

⑤ _____
(estimate)

$$\begin{array}{r} 412 \\ * 176 \\ \hline \end{array}$$



NAME _____

DATE _____

TIME _____

Adding Decimals

For Problems 1–3, make an estimate. Write a number sentence to show how you estimated. Then solve the problem using partial-sums addition, column addition, or U.S. traditional addition. Use your estimate to check that your answer is reasonable.



<p>① $2.4 + 9.3 = ?$</p> <p>_____</p> <p>(estimate)</p> <p>$2.4 + 9.3 =$ _____</p>	<p>② $5.8 + 3.36 = ?$</p> <p>_____</p> <p>(estimate)</p> <p>$5.8 + 3.36 =$ _____</p>	<p>③ $12.07 + 6.98 = ?$</p> <p>_____</p> <p>(estimate)</p> <p>$12.07 + 6.98 =$ _____</p>
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For Problems 4 and 5, write a number model with a letter for the unknown. Then solve.

- ④ At the 2012 Summer Olympics in London, Usain Bolt won the men's 100-meter race with a time of 9.63 seconds and the men's 200-meter race with a time of 19.32 seconds. How long did it take the sprinter to run the two races combined?

(number model)

Answer: _____ seconds

- ⑤ In July 2006, the smallest living horse was 44.5 cm tall, from the ground to its back. In May 2006, the smallest living dog was 10.16 cm tall, from the ground to the top of its head. How far from the ground would the dog's head be if it stood on the horse's back?

(number model)

Answer: _____ cm

Practice

⑥ What is $\frac{1}{2}$ of 12?

⑦ What is $\frac{1}{2}$ of 11?

⑧ What is $\frac{1}{5}$ of 11?

Answer: _____

Answer: _____

Answer: _____

Subtracting Decimals



NAME _____

DATE _____

TIME _____



For Problems 1–3, make an estimate. Write a number sentence to show how you estimated. Then solve the problem using trade-first subtraction, counting-up subtraction, or U.S. traditional subtraction. Use your estimate to check that your answer is reasonable.

<p>① $10.6 - 3.9 = ?$</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">(estimate)</p> <p>$10.6 - 3.9 =$ _____</p>	<p>② $8.97 - 4.22 = ?$</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">(estimate)</p> <p>$8.97 - 4.22 =$ _____</p>	<p>③ $24.29 - 13.37 = ?$</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">(estimate)</p> <p>$24.29 - 13.37 =$ _____</p>
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For Problems 4 and 5, write a number model with a letter for the unknown. Then solve.

④ At the 2012 Summer Olympics in London, swimmer Michael Phelps won the gold medal in the men's 100-meter butterfly with a time of 51.21 seconds. The eighth-place swimmer finished in 52.05 seconds. How much faster was Phelps?

Number model: _____

Answer: _____ second

⑤ In May 2009, the longest dog tongue ever measured was 11.43 cm long. In February 2009, the longest human tongue ever measured was 9.8 cm long. How much longer was the dog tongue than the human tongue?

Number model: _____

Answer: _____ cm

Practice

Give the value of the 9 in each decimal.

- | | | |
|---------------|----------------|----------------|
| ⑥ 4.897 _____ | ⑦ 0.981 _____ | ⑧ 49.772 _____ |
| ⑨ 6.019 _____ | ⑩ 496.12 _____ | ⑪ 72.497 _____ |

Number Stories with Money



NAME _____

DATE _____

TIME _____



For each number story, write a number model with a letter for the unknown. Then solve. Show your work on the back of this paper.

- ① You buy a loaf of fresh bread for \$1.49 and a bottle of honey for \$1.99. How much do you spend in all?

_____ (number model)

Answer: _____

- ③ A pound of strawberries costs \$2.49. A pound of apples costs \$1.99. How much more money per pound do the strawberries cost than the apples?

_____ (number model)

Answer: _____

- ② Your grocery bill comes to \$17.37. You pay with a \$20.00 bill. How much change do you get?

_____ (number model)

Answer: _____

- ④ One granola bar costs 88 cents. How much do two granola bars cost?

_____ (number model)

Answer: _____

Practice

- ⑤ Make an estimate. Then divide using partial-quotients division. Write your remainder as a fraction.

$$812 \div 17 = ?$$

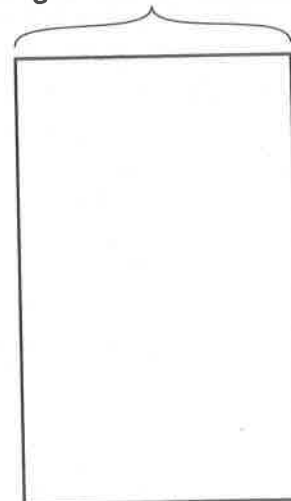
Estimate: _____

Answer: _____

- ⑥ Draw an area model to match your solution in Problem 5.

Area (Dividend): _____

Length (Divisor): _____



Width (Quotient): _____