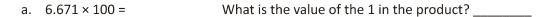
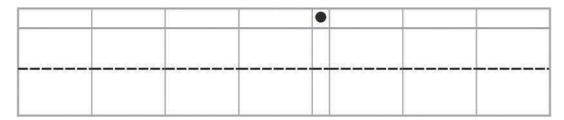
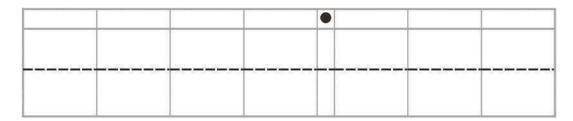
Use the place value chart and arrows to show how the value of each digit changes. Then name the value of the indicated digit in both unit form and standard form.









Date _____

1.	Wri	te the standard form of a decimal fraction that has:
	a.	3 ones and 7 tenths
	b.	3 thousandths and 7 tenths

d. 3 hundredths and 7 thousandths _____

3 tenths and 7 thousandths _____

2. Write an equation that would change the value of the digit 2 in the decimal fraction 0.20 to 2 hundredths.



Use place value understanding to reason abstractly about values of digits in decimal fractions.



Lesson 2:

Name _____ Date _____

1. Convert using an equation.

a. 2 meters to centimeters 2 m = _____ cm

- b. 40 millimeters to meters 40 mm = _____ m
- 2. Write the equivalent measures.
 - a. A piece of fabric measures 3.9 meters. Express this length in centimeters.
 - b. Ms. Ramos's thumb measures 4 centimeters. Express this length in meters.



Nai	me	Date	
1.	Express nine thousandths as a decimal.		

2. Express twenty-nine thousandths as a fraction.

- 3. Express 24.357 in words.
 - a. Write the expanded notation using fractions or decimals.

b. Express in unit form.



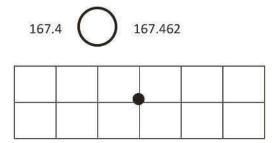
Lesson 4:

Name decimal fractions in expanded notation, unit form, and word form by applying place value reasoning.



Name	Date
INALLIC	Date

1. Show the numbers on the place value chart using digits. Use >, <, or = to compare. Explain your thinking in the space to the right.



2. Use >, <, and = to compare the numbers.



3. Arrange the numbers in decreasing order.

76.342 76.332 76.232 76.343



Lesson 5:

Compare decimal fractions to the thousandths using like units, and express comparisons with >, <, =.

Name ______ Date _____

Use the table to round the number to the given places. Label the number lines, and circle the rounded value.

8.546

Tens	Ones	•	Tenths	Hundredths	Thousandths
	8	•	5	4	6
		•	85	4	6
		•		854	6
		•			8546

a. Hundredths



b. Tens



Name	Date

Round the quantity to the given place value. Draw number lines to explain your thinking. Circle the rounded value on the number line.

a. 13.989 to the nearest tenth

b. 382.993 to nearest hundredth



Round a given decimal to any place using place value understanding and the vertical number line.



Lesson 7:

Name	Date

1. Solve.

a. 4 thousandths + 8 thousandths = _____ thousandths = _____ hundredths _____ thousandths

b. 64 thousandths + 8 thousandths = _____ thousandths = _____ hundredths _____ thousandths

2. Solve using the standard algorithm.

a 3	31.4 +	1 209	=	

b. 36.258 + 8.67 = _____



Lesson 8:

Add decimals using place value strategies, and relate those strategies to a written method.

Name _____ Date _____

1. Subtract.

 $0.017-0.008 = \underline{\hspace{1cm}} thousand ths - \underline{\hspace{1cm}} thousand ths = \underline{\hspace{1cm}} thousand ths$

Express the difference in standard form.

2. Subtract vertically, showing all work.



Na	Name Date				
1.	Solve by drawing form.	disks on a place value	chart. Write an equatio	on, and express the product	in standard
	4 copies of 3 tent	hs			
2.	Complete the are	ea model, and then find	the product.		
	3 × 9.63				
	3 × 3.03		 		
	## No. 10	3 × ones	3 × tenths	3 × hundredths	



Lesson 10:

Multiply a decimal fraction by single-digit whole numbers, relate to a written method through application of the area model and place value understanding, and explain the reasoning used.

Name _____ Date ____

- 1. Use estimation to choose the correct value for each expression.
 - a. 5.1×2
- 1.02

10.2

102

- b. 4 × 8.93
- 35.72

- 357.2
- 3572
- 2. Estimate the answer for 7.13×6 . Explain your reasoning using words, pictures, or numbers.

Name Date _____

1. Complete the sentences with the correct number of units, and then complete the equation.

a. 2 groups of _____ tenths is 1.8.

1.8 ÷ 2 = _____

b. 4 groups of _____ hundredths is 0.32.

0.32 ÷ 4 = _____

2. Complete the number sentence. Express the quotient in unit form and then in standard form.

a. $4.5 \div 5 =$ ______ tenths $\div 5 =$ ______ tenths = _____

b. $6.12 \div 6 =$ _____ ones $\div 6 +$ _____ hundredths $\div 6$

= _____ ones + _____ hundredths

=_____



Name _____ Date _____

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

5.36 ÷ 2 = _____

Ones	Tenths	Hundredths

2 5.36

2. Solve using the standard algorithm.

0.52 ÷ 4 = _____

Name	Date	

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

0.6 ÷ 4 = _____

Ones	•	Tenths	Hundredths

4 0.6

2. Solve using the standard algorithm.

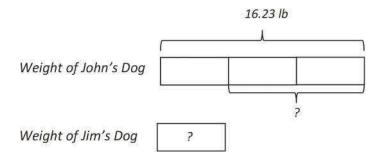
 $9.8 \div 5 =$

Lesson 14:

Divide decimals using place value understanding, including remainders in the smallest unit.

Name	Date
INALLIC	Date

Write a word problem with two questions that matches the strip diagram below, and then solve.





Lesson 15: Solve word problems using decimal operations.

Name Date		
	Date	

Record the factors of the given numbers as multiplication sentences and as a list in order from least to greatest. Classify each as prime (P) or composite (C).

	Multiplication Sentences	Factors	Prime (P) or Composite (C)
a.	9	The factors of 9 are:	
b.	12	The factors of 12 are:	
C.	19	The factors of 19 are:	

22

Lesson 1:

Name	Date

1. Explain your thinking or use division to answer the following.

a.	Is 2 a factor of 34?	b.	Is 3 a factor of 34?
C.	Is 4 a factor of 72?	d.	Is 3 a factor of 72?

2. Use the associative property to explain why the following statement is true. Any number that has 9 as a factor also has 3 as a factor.



Name ______ Date _____

1. Fill in the unknown multiples of 11.

2. Complete the pattern of multiples by skip-counting.

3. a. List the numbers that have 18 as a multiple.

b. What are the factors of 18?

c. Are your two lists the same? Why or why not?



Name Date	
-----------	--

Use the calendar below to complete the following:

- 1. Cross off all composite numbers.
- 2. Circle all of the prime numbers.
- 3. List any remaining numbers.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						



Lesson 4: Explore properties of prime and composite numbers to 100 by using multiples.

Name _____ Date ____

- 1. Find the products.
 - a. 1,900 × 20

b. 6,000 × 50

c. 250 × 300

2. Explain how knowing $50 \times 4 = 200$ helps you find 500×400 .



Lesson 5:

Multiply multi-digit whole numbers and multiples of 10 using place value patterns and the distributive and associative properties.

Name _____ Date ____

Round the factors and estimate the products.

a. 656 × 106 ≈

b. $3,108 \times 7,942 \approx$

c. 425 × 9,311 ≈

d. 8,633 × 57,008 ≈



Lesson 6:

Estimate multi-digit products by rounding factors to a basic fact and using place value patterns.

Name	Date

1. Draw a model. Then, write the numerical expressions.

a.	The difference between 8 forty-sevens and 7 forty-sevens	b. 6 times the sum of 12 and 8
	7 Torty Sevens	

2. Compare the two expressions using >, <, or =.

02 ^ (70 + 8)		62 × (70 + 8)	\bigcirc	(70 + 8) × 26
---------------	--	---------------	------------	---------------

Name _____ Date ____

Solve using mental math. Draw a strip diagram and fill in the blanks to show your thinking.

b.
$$25 \times 13 =$$
 twenty-fives

Think: 50 elevens – 1 eleven

$$= (\times 11) - (\times 11)$$

Think: _____ twenty-fives + _____ twenty-fives



Lesson 8:

Convert numerical expressions into unit form as a mental strategy for multi-digit multiplication.

Name

Date _____

Draw an area model, and then solve using the standard algorithm.

21

$$\times$$
 23

Name	Date
Name	Date

Draw an area model. Then, solve using the standard algorithm. Use arrows to match the partial products from your area model to the partial products in the algorithm.

$$\times$$
 42

$$\times$$
 42



Lesson 10: Connect area models and the distributive property to partial products of the standard algorithm with renaming.

Name _____ Date _____

Draw an area model. Then, solve using the standard algorithm.

a. 642 × 257

642

 \times 257

b. 642 × 207

6 4 2

 \times 207

Name	Date
inallie	Date

Estimate the product first. Solve by using the standard algorithm. Use your estimate to check the reasonableness of the product.

Name _	Date
Solve.	
	picked 30 bags of apples on Monday and sold them at his fruit stand for \$3.45 each. The following e picked and sold 26 bags.
a.	How much money did Juwad earn in the first week?
b.	How much money did he earn in the second week?
C.	How much did Juwad earn selling bags of apples these two weeks?
d.	Extension: Each bag Juwad picked holds 15 apples. How many apples did he pick in two weeks?
u.	Write an expression to represent this problem.



Name ______ Date _____

- 1. Estimate the product. Solve using an area model and the standard algorithm. Remember to express your products in standard form.
 - a. 33.2 × 21 ≈ × =

b. 1.7 × 55 ≈ _____ × ____ = ____

2. If the product of 485×35 is 16,975, what is the product of 485×3.5 ? How do you know?



Lesson 14:

Multiply decimal fractions with tenths by multi-digit whole numbers using place value understanding to record partial products.



Name	Date

Use estimation and place value reasoning to find the unknown product. Explain how you know.

1. If $647 \times 63 = 40,761$

then

6.47 × 63 = _____

- 2. Solve using the standard algorithm.
 - a. 6.13×14

b. 104.35×34



Name	
Cating at a Thomas alive vising the atom double leavithme. Vov. mag., due.	on one model if it helps you
Estimate. Then, solve using the standard algorithm. You may draw	w an area model if it helps you.

a. $3.03 \times 402 \approx$ _____ × ___ = ___ b. $667 \times 1.25 \approx$ ____ × ___ = ___

212

Reason about the product of a whole number and a decimal with Lesson 16: hundredths using place value understanding and estimation.

Name	Date

Solve.

a. Convert pounds to ounces.(1 pound = 16 ounces)

b. Convert kilograms to grams.



Lesson 17: Use whole number multiplication to express equivalent measurements.

Name _____ Date ____

1. Convert grams to kilograms by completing the number sentences.

=

=

Name _	_ Date	
Solve.		

To practice for an Ironman competition, John swam 0.86 kilometer each day for 3 weeks. How many meters did he swim in those 3 weeks?





Name	Date
Name	Date

Divide. Show your thinking.

	,		
a.	17,000 ÷ 100	b.	59,000 ÷ 1,000
c.	12,000 ÷ 40	d.	480,000 ÷ 600



Name _____ Date _____

Estimate the quotient for the following problems.

a. 608 ÷ 23

≈	÷	

=____

b. 913 ÷ 31

≈ _____÷ ____

=___

c. 151 ÷ 39

≈ _____÷ ____

=

d. 481 ÷ 68

≈ _____÷ ____

=

Name ______ Date _____

Estimate the quotients for the following problems.

≈ _____÷ ____

=

b.	8,491	÷	37

≈ ____÷ ____

= _____

c.
$$3,704 \div 53$$

≈ _____÷ ____

=____

d. 4,819 ÷ 68

≈ _____÷ ____

=



Name	Date

Divide, and then check using multiplication.



Name	Date	
Ivallic	Date	

Divide. Then, check with multiplication.

a.
$$78 \div 21$$



322

Name	Date	
	2410	

Divide. Then, check using multiplication.

a.
$$326 \div 53$$



347

Name	Date

Divide. Then, check using multiplication.



Name	Date

Divide. Then, check using multiplication.



Lesson 27:

Divide three- and four-digit dividends by two-digit divisors resulting in two- and three-digit quotients, reasoning about the decomposition of successive remainders in each place value.

Name ______ Date _____

- 1. Divide.
 - a. 27.3 ÷ 3

b. 27.3 ÷ 30

c. 273 ÷ 300

2. If $72.9 \div 90 = 0.81$, then the quotient of $72.9 \div 9$ is _______. Use place value reasoning to explain the placement of the decimal point.



Lesson 28:

Divide decimal dividends by multiples of 10, reasoning about the placement of the decimal point and making connections to a written method.

Name	Date

Estimate the quotients.

- a. 1.64 ÷ 22 ≈
- b. 123.8 ÷ 62 ≈
- c. 6.15 ÷ 31 ≈



Name	Date

- 1. Estimate. Then, divide using the standard algorithm and check.
 - a. $45.15 \div 21$

b. 14.95 ÷ 65

2. We learned today that division expressions that have the same quotient and remainders are not necessarily equal to each other. Explain how this is possible.

Lesson 30:

Divide decimal dividends by two-digit divisors, estimating quotients, reasoning about the placement of the decimal point, and making connections to a written method.

Name	Date
Traine	

Divide.

a. 28 ÷ 35

b. 68.25 ÷ 65



Lesson 31: Divide decimal dividends by two-digit divisors, estimating quotients, reasoning about the placement of the decimal point, and making

connections to a written method.

OTOBI	/ OF IIII	T-0	TELLO	FDITION

Lesson 32 Exit Ticket

5 • 2

Name	Date	

Solve this problem, and show all of your work.

Kenny is ordering uniforms for both the girls' and boys' tennis clubs. He is ordering shirts for 43 players and two coaches at a total cost of \$658.35. Additionally, he is ordering visors for each player at a total cost of \$368.51. How much will each player pay for the shirt and visor?



Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown.

Lesson 32:

Name	Date
Solve.	

Hayley borrowed \$1,854 from her parents. She agreed to repay them in equal installments throughout the next 18 months. How much will Hayley still owe her parents after a year?



Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown.

Name Date _____

Solve by drawing the rectangular fraction model.

1.
$$\frac{1}{2} + \frac{1}{5} =$$

2. In one hour, Ed used $\frac{2}{5}$ of the time to complete his homework and $\frac{1}{4}$ of the time to check his email. How much time did he spend completing homework and checking email? Write your answer as a fraction. (Extension: Write the answer in minutes.)



Lesson 1:

Add fractions with unlike units using the strategy of creating equivalent fractions.



Name Date

1. Draw a model to help solve $\frac{5}{6} + \frac{1}{4}$. Write your answer as a mixed number.

2. Patrick drank $\frac{3}{4}$ liter of water Monday before jogging. He drank $\frac{4}{5}$ liter of water after his jog. How much water did Patrick drink altogether? Write your answer as a mixed number.



Lesson 2: Add fractions with sums between 1 and 2.

Name ______ Date _____

For the following problems, draw a picture using the rectangular fraction model and write the answer. Simplify your answer, if possible.

a. $\frac{1}{2} - \frac{1}{7} =$

b. $\frac{3}{5} - \frac{1}{2} =$

Name _____ Date _____

For the following problems, draw a picture using the rectangular fraction model and write the answer. Simplify your answer, if possible.

a.
$$1\frac{1}{5} - \frac{1}{2} =$$

b.
$$1\frac{1}{3} - \frac{5}{6} =$$

Name	Date
Name	Date

Solve the word problem using the RDW strategy. Show all of your work.

Mr. Pham mowed $\frac{2}{7}$ of his lawn. His son mowed $\frac{1}{4}$ of it. Who mowed the most? How much of the lawn still needs to be mowed?



Name Date

Date

Add or subtract.

a.
$$5 + 1\frac{7}{8} =$$

b.
$$3 - 1\frac{3}{4} =$$

c.
$$7\frac{3}{8} + 4 =$$

d.
$$4-2\frac{3}{7}=$$



Date _____

Make like units, and then add.

a.
$$\frac{1}{6} + \frac{3}{4} =$$

b.
$$1\frac{1}{2} + \frac{2}{5} =$$



Name _____ Date ____

Add.

1.
$$3\frac{1}{2} + 1\frac{1}{3} =$$

$$2. \quad 4\frac{5}{7} + 3\frac{3}{4} =$$



Date _____

Generate equivalent fractions to get like units. Then, subtract.

a.
$$\frac{3}{4} - \frac{3}{10} =$$

b.
$$3\frac{1}{2} - 1\frac{1}{3} =$$

Name ______ Date _____

Subtract.

1.
$$5\frac{1}{2} - 1\frac{1}{3} =$$

$$2. \quad 8\frac{3}{4} - 5\frac{5}{6} =$$



Name _____ Date ____

1. Circle the correct answer.

a.
$$\frac{1}{2} + \frac{5}{12}$$

greater than 1

less than 1

b.
$$2\frac{7}{8} - 1\frac{7}{9}$$

greater than 1

less than 1

c.
$$1\frac{1}{12} - \frac{7}{10}$$

greater than $\frac{1}{2}$

less than $\frac{1}{2}$

d.
$$\frac{3}{7} + \frac{1}{8}$$

greater than $\frac{1}{2}$

less than $\frac{1}{2}$

2. Use >, <, or = to make the following statement true.

$$4\frac{4}{5} + 3\frac{2}{3} - 8\frac{1}{2}$$



Name ______ Date _____

Fill in the blank to make the statement true.

1.
$$1\frac{3}{4} + \frac{1}{6} + \underline{} = 7\frac{1}{2}$$

2.
$$8\frac{4}{5} - \frac{2}{3} - \underline{} = 3\frac{1}{10}$$



Lesson 12: Strategize to solve multi-term problems.

Name	Date
· · · · · · ·	

Solve the word problem using the RDW strategy. Show all of your work.

Cheryl bought a sandwich for $5\frac{1}{2}$ dollars and a drink for \$2.60. If she paid for her meal with a \$10 bill, how much money did she have left? Write your answer as a fraction and in dollars and cents.



Lesson 13:

Solve multi-step word problems; assess reasonableness of solutions using benchmark numbers.

Name	Date

Draw the following ribbons.

a. 1 ribbon. The piece shown below is only $\frac{2}{3}$ of the whole. Complete the drawing to show the whole ribbon.

b. 1 ribbon. The piece shown below is $\frac{1}{4}$ of the whole. Complete the drawing to show the whole ribbon.

c. 3 ribbons, A, B, and C. 1 third of A is the same length as B. C is half as long as B. Draw a picture of the ribbons.

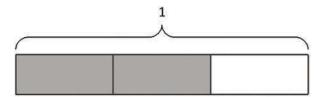


Lesson 14: Explore part-to-whole relationships.

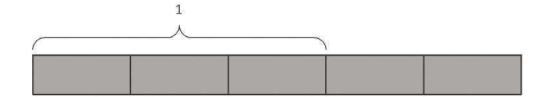
Date _____

1. Decompose each fraction modeled by a strip diagram as a sum of unit fractions. Write the equivalent multiplication sentence.

a.



b.



2. Draw a strip diagram, and record the given fraction's decomposition into unit fractions as a multiplication sentence.

 $\frac{6}{9}$

lame	Date

1. Solve using unit form.

$$5 \times \frac{2}{3}$$

2. Solve.

$$11 \times \frac{5}{6}$$



Name ______ Date _____

Solve using any method.

1. $7 \times \frac{3}{4}$

2. $9 \times \frac{2}{5}$

3. $60 \times \frac{5}{8}$



Date _____

Multiply. Write each product as a mixed number.

1. $4 \times 5\frac{3}{8}$

2. $4\frac{3}{10} \times 3$



Name ______ Date _____

1. Fill in the unknown factors.

$$8 \times 5\frac{2}{3} = (\underline{} \times 5) + (\underline{} \times \frac{2}{3})$$

2. Multiply. Use the distributive property.

$$6\frac{5}{8} \times 7$$

Name	Date	

Use the RDW process to solve.

Jeff has ten packages that he wants to mail. Nine identical packages weigh $2\frac{7}{8}$ pounds each. A tenth package weighs two times as much as one of the other packages. How many pounds do all ten packages weigh?



Name _____ Date _____

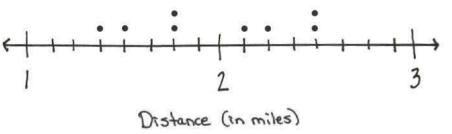
Coach Taylor asked his team to record the distance they ran during practice.

The distances are listed in the table.

- 1. Use the table to locate the incorrect data on the dot plot.
 - Circle any incorrect points.

Mark any missing points.

Running Practice



= 1 team member

2. Of the team members who ran $1\frac{6}{8}$ miles, how many miles did those team members run combined?

Team Members	Distance (in miles)
Alec	$1\frac{3}{4}$
Henry	$1\frac{1}{2}$
Charles	$2\frac{1}{8}$
Steve	$1\frac{3}{4}$
Pitch	$2\frac{2}{4}$
Raj	1 ⁶ / ₈
Pam	$2\frac{1}{2}$
Tony	$1\frac{3}{8}$

Name Date

1. Find the value of each of the following.



- a. $\frac{1}{4}$ of 16 =
- b. $\frac{3}{4}$ of 16 =
- 2. Out of 18 cookies, $\frac{2}{3}$ are chocolate chip. How many of the cookies are chocolate chip?

Name	Date
vallie	Date

Solve using a strip diagram.

a. $\frac{3}{5}$ of 30

b. $\frac{3}{5}$ of a number is 30. What's the number?

c. Mr. Johnson baked 2 dozen cookies. Two-thirds of the cookies were oatmeal. How many oatmeal cookies did Mr. Johnson bake?



Lesson 9: Multiply any whole number by a fraction using strip diagrams.



Name _____ Date ____

Solve each problem in two different ways as modeled in the example.

Example:
$$\frac{2}{3} \times 6 = \frac{2 \times 6}{3} = \frac{12}{3} = 4$$

$$\frac{2}{3} \times 6 = \frac{2 \times 6}{3} = 4$$

a.
$$\frac{2}{3} \times 15$$

$$\frac{2}{3} \times 15$$

b.
$$\frac{5}{4} \times 12$$

$$\frac{5}{4} \times 12$$

- 1. Express 36 minutes as a fraction of an hour: 36 minutes = _____ hour
- 2. Solve.
- a. $\frac{2}{3}$ feet = _____ inches b. $\frac{2}{5}$ m = ____ cm c. $\frac{5}{6}$ year = ____ months



Lesson 11:

Find a fraction of a measurement, and solve word problems.

Name ______ Date _____

- 1. Rewrite these expressions using words.
 - a. $\frac{3}{4} \times \left(2\frac{2}{5} \frac{5}{6}\right)$

b. $2\frac{1}{4} + \frac{8}{3}$

2. Write an expression, and then solve.

Three less than four times the sum of eight thirds and nine

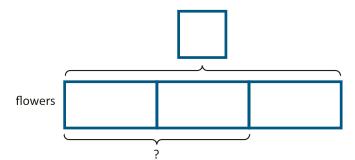


Name ______ Date _____

1. Use a strip diagram to solve.

 $\frac{2}{3}$ of 5

2. Create a story problem about flowers for the strip diagram below. Your story must include a fraction.



Name	Date	

In a classroom, $\frac{1}{6}$ of the students are wearing blue shirts, and $\frac{2}{3}$ are wearing white shirts. There are 36 students in the class. How many students are wearing a shirt other than blue or white?



Lesson 14: Solve and create fraction word problems involving addition, subtraction, and multiplication.



Name _____ Date ____

Convert. Express your answer as a mixed number, if possible.



Lesson 15:

Convert measures involving whole numbers, and solve multi-step word problems.

Name

Date _____

Convert. If possible, express your answer as a mixed number.

a.
$$2\frac{1}{6}$$
 ft = ______ in

b.
$$3\frac{3}{4}$$
 yd = _____ ft

d.
$$3\frac{2}{3}$$
 years = _____ months



Name ______ Date _____

1. Draw a strip diagram and a number line to solve. Fill in the blanks that follow.

a.
$$5 \div \frac{1}{2} =$$

There are ____ halves in 1 whole.

There are ____ halves in 5 wholes.

5 is $\frac{1}{2}$ of what number? _____

b.
$$4 \div \frac{1}{4} =$$

There are ____ fourths in 1 whole.

There are _____ fourths in _____ wholes.

4 is $\frac{1}{4}$ of what number? _____

2. Ms. Leverenz is doing an art project with her class. She has a 3 foot piece of ribbon. If she gives each student an eighth of a foot of ribbon, will she have enough for her class of 22 students?



- 1. Solve. Support at least one of your answers with a model or strip diagram.
 - a. $\frac{1}{2} \div 4 =$ _____

b. $\frac{1}{8} \div 5 =$ _____

2. Larry spends half of his workday teaching piano lessons. If he sees 6 students, each for the same amount of time, what fraction of his workday is spent with each student?



Lesson 18:

Name	Date

1. Kevin divides 3 pieces of paper into fourths. How many fourths does he have? Draw a picture to support your response.

2. Sybil has $\frac{1}{2}$ of a pizza left over. She wants to share the pizza with 3 of her friends. What fraction of the original pizza will Sybil and her 3 friends each receive? Draw a picture to support your response.



Lesson 19: Solve problems involving fraction division.



Name ______ Date _____

Create a word problem for the following expressions, and then solve.

a.
$$4 \div \frac{1}{2}$$

b.
$$\frac{1}{2} \div 4$$



Lesson 20:

Write equations and word problems corresponding to strip and number line diagrams.



Name	Date
Traine	

Maria gets a summer job that pays \$1,200 per month and provides a place for her to live, so she does not need to pay rent. Her budget is described in the table. How much is Maria's car payment if her budget is balanced?

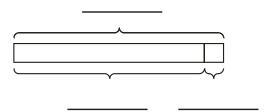
Maria's Budget		
Description Amount		
Groceries	\$325	
Gas for car	\$75	
Phone	\$130	
Insurance	\$255	
Car payment		
Savings	\$100	
Restaurants and entertainment	\$80	



Lesson 21: Balance a simple budget.

Name	Date	

- 1. The strip diagram represents John's pay.
 - a. Label the whole and the parts with gross income, net income, and taxes.



b. What are the two types of taxes that are deducted from a person's gross income?

2. John's net income each month is \$5,500. Each month, \$448.20 is deducted for income tax, \$335.50 is deducted for payroll tax, and \$210.00 is deducted for health insurance. What is John's monthly gross income?



Lesson 22:

Explain the difference between gross income and net income. Define income tax and payroll tax.

Name	Date	

1. Mrs. Diaz buys school clothes for her children. The subtotal on the receipt, which shows the price for all the clothes before tax, is \$250. The sales tax rate is $\frac{1}{10}$ of the price of the clothes. How much does Mrs. Diaz spend in all?

2. Which of the following are examples of property taxes? Circle all correct answers.

A tax paid on a farm a person owns.

A tax paid on a piece of clothing a person buys.

A tax paid on a home a person owns.

A tax paid on a piece of land a person owns.



Lesson 23: Define property tax and sales tax.

Name	Date

1. What are the two methods of payment? Give the advantages and disadvantages of each.

2. What actions can be taken to keep a budget balanced when expenses exceed income?



Lesson 24:

Identify the advantages and disadvantages of different methods of payment.

Name _____ Date ____

- 1. Write an equivalent expression in numerical form.
 - 1 fourth as much as the product of two-thirds and 0.8

- 2. Write an equivalent expression in word form.
 - a. $\frac{3}{8} \times (1 \frac{1}{3})$

b. $(1-\frac{1}{3}) \div 2$

3. Compare the expressions in 2(a) and 2(b). Without evaluating, identify which quantity is greater. Explain your answer.



Name Date

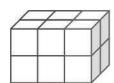
Date _____

1. What is the volume of the figures pictured below?

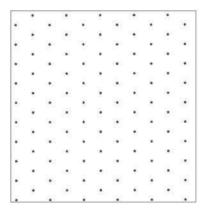




b.



2. Draw a picture of a figure with a volume of 3 cubic units on the dot paper.



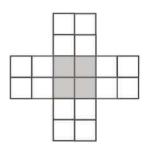


Lesson 1:

Explore volume by building with and counting unit cubes.

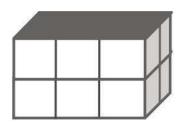
Name	Date	
	_	

1. If this figure were to be folded into a box, how many cubes would fill it?



Number of cubes:

2. Predict how many centimeter cubes will fit in the box, and briefly explain your prediction. Use cubes to find the actual volume. (The figure is not drawn to scale.)



Prediction: _____

Actual: _____

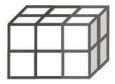
Nam	e	Date	
1	Inc		

1. Use unit cubes to build the figure to the right, and fill in the missing information.

Number of layers: _____

Number of cubes in each layer: _____

Volume: _____ cubic centimeters

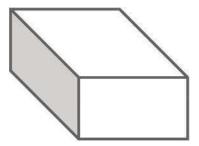


2. This prism measures 3 units by 4 units by 2 units. Draw the layers as indicated.

Number of layers: 4

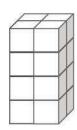
Number of cubic units in each layer: 6

Volume: _____ cubic centimeters



Name	Dat	e
		·

1. Calculate the volume of prism.



Length: _____ mm

Width: _____ mm

Height: _____ mm

Volume: _____ mm³

Write the multiplication sentence that shows how you calculated the volume. Be sure to include the units.

2. A rectangular prism has a top face with an area of 20 $\rm ft^2$ and a height of 5 ft. What is the volume of this rectangular prism?

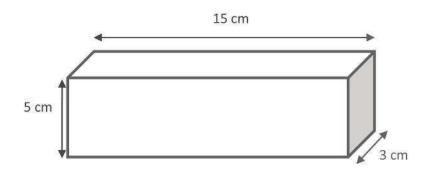


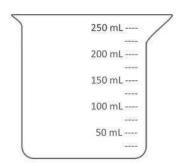
Lesson 4: Use multiplication to calculate volume.



Name _____





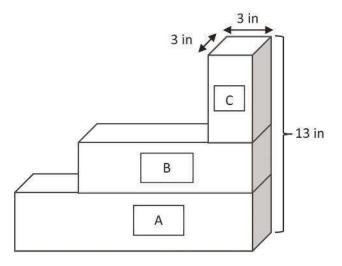


- a. Find the volume of the prism.
- b. Shade the beaker to show how much liquid would fill the box.

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

lame	Date	

The image below represents three planters that are filled with soil. Find the total volume of soil in the three planters. Planter A is 14 inches by 3 inches by 4 inches. Planter B is 9 inches by 3 inches by 3 inches.



non-overlapping rectangular prisms.



Name	Date

A storage shed is a rectangular prism and has dimensions of 6 meters by 5 meters by 12 meters. If Jean were to double these dimensions, she believes she would only double the volume. Is she correct? Explain why or why not. Include a drawing in your explanation.



Lesson 7:

Solve word problems involving the volume of rectangular prisms with whole number edge lengths.



Name	Date	
Sketch a rectangular prism that has a volume of 36 cub Fill in the blanks that follow.	ic cm. Label the dimensions of each side on t	:he prism.
	Height: _	cm
	Length: _	cm
	Width: _	cm
	Volume:	cubic cm



Lesson 8:

Apply concepts and formulas of volume to design a sculpture using rectangular prisms within given parameters.

A student designed this sculpture. Using the dimensions on the sculpture, find the dimensions of each rectangular prism. Then, calculate the volume of each prism.

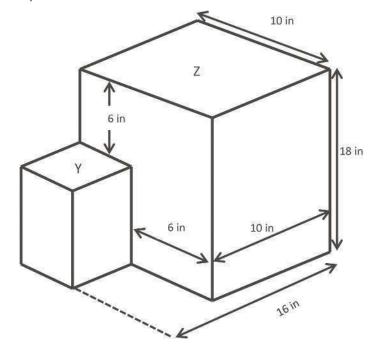
a. Rectangular Prism Y

Height: _____ inches

Length: _____ inches

Width: _____ inches

Volume: _____ cubic inches



b. Rectangular Prism Z

Height: _____ inches

Length: _____ inches

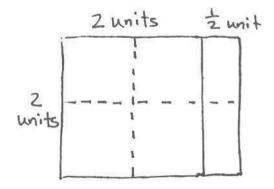
Width: _____ inches

Volume: _____ cubic inches

c. Find the total volume of the sculpture. Label the answer.

Name	Date

Emma tiled a rectangle and then sketched her work. Fill in the missing information, and multiply to find the area.



Emma's Rectangle:

____ units long ____ units wide

Area = _____ units²



Lesson 10:

Find the area of rectangles with whole-by-mixed and whole-by-fractional number side lengths by tiling, record by drawing, and relate to fraction multiplication.

Name	Date	_
Measure the rectangle to the neare	t $\frac{1}{4}$ inch with your ruler, and label the dimensions. Find the area.	
	•	

EUREKA MATH° TEKS EDITION

Nama	Data	
Name	Date	

Find the area of the following rectangles. Draw an area model if it helps you.

1.
$$\frac{7}{2}$$
 mm × 3 mm

2.
$$5\frac{7}{8} \text{ km} \times 4 \text{ km}$$



Lesson 12: Multiply mixed number factors, and relate to the distributive property and the area model.



Name	_ Date	

Mr. Klimek made his wife a rectangular vegetable garden. The width is $5\frac{3}{4}$ ft, and the length is 9 ft. What is the area of the garden?



Lesson 13: Solve real-world problems involving area of figures with fractional side lengths using visual models and/or equations.



Name	Date

Wheat grass is grown in planters that are 3 inch by $1\frac{3}{4}$ inch. If there is a 6 × 6 array of these planters with no space between them, what is the area covered by the planters?

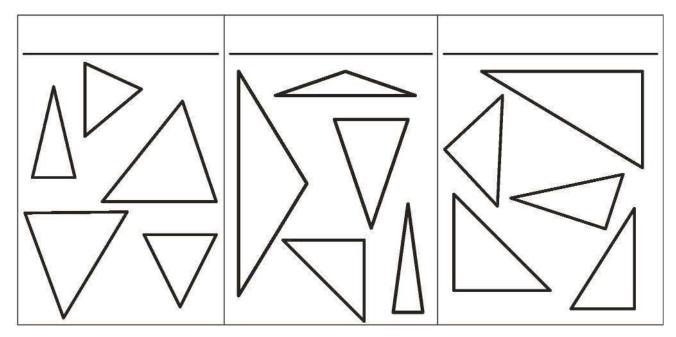


Lesson 14: Solve real-world problems involving area of figures with fractional side lengths using visual models and/or equations.

203

Use appropriate tools to solve the following problems.

1. The triangles below have been classified by a shared attribute (side length <u>or</u> angle type). Use one of the words acute, right, obtuse, scalene, isosceles, or equilateral to label the headings to identify the way the triangles have been sorted.



2. Draw lines to identify each triangle according to side length.

a.



Equilateral

b.

Isosceles

c.

Scalene



Lesson 15: Analyze and classify triangles based on side length, angle measure, or both.



Name	Date

1. Draw an isosceles triangle.

2. Draw a scalene triangle.



Name	Date	

a. Use a ruler and a set square to draw a trapezoid.

b. What attribute must be present for a quadrilateral to also be a trapezoid?



Lesson 17:

Draw trapezoids to clarify their attributes, and define trapezoids based on those attributes.

Name	Date
variic	Date

1. Draw a parallelogram.

2. What attributes do all parallelograms share?



Lesson 18: Draw parallelograms to clarify their attributes, and define parallelograms based on those attributes.



Name	Date	
valle	Date	

1. Draw a rhombus.

2. Draw a rectangle.



Vame	Date	

1. List the property that must be present to call a rectangle a square.

2. Excluding rhombuses and squares, explain the difference between parallelograms and kites.



Lesson 20: Draw

Draw kites and squares to clarify their attributes, and define kites and squares based on those attributes.



Name	Date
	ur tools to draw a square in the space below. Then, fill in the blanks with an attribute. There is more ne answer to some of these.
a.	Because a square is a kite, it must have
b.	Because a square is a rhombus, it must have
c.	Because a square is a rectangle, it must have
d.	Because a square is a parallelogram, it must have
e.	Because a square is a quadrilateral, it must have



Lesson 21: Classify two-dimensional figures in a hierarchy based on properties.

Na	me				Date _		
1.	Use the word ban	nk to fill in the blank	ss.	squares	parallelograms]	
	All	_ are	_, but not all		are	·	
2.	Use the word ban	nk to fill in the blank	ΚS.	kites	rhombuses		
	AII	_ are	_, but not all _.		are		



Lesson 22:

Draw and identify varied two-dimensional figures from given attributes.

Name Date

Date _____

Use number line $\boldsymbol{\ell}$ to answer the questions.



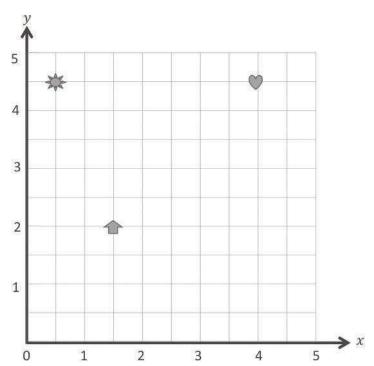
- a. Plot point C so that its distance from the origin is 1.
- b. Plot point $E = \frac{4}{5}$ closer to the origin than C. What is its coordinate?
- c. Plot a point at the midpoint of C and E. Label it H.



Lesson 1: Construct a coordinate system on a line.

1. Name the coordinates of the shapes below.

Shape	x-coordinate	y-coordinate
Sun		
Arrow		
Heart		

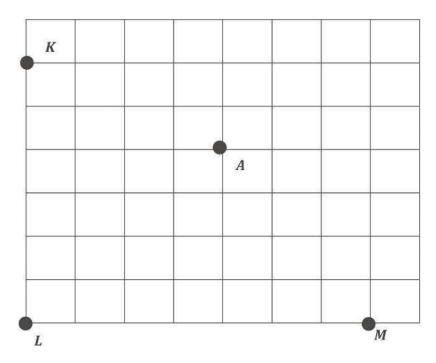


- 2. Plot a square at (3, $3\frac{1}{2}$).
- 3. Plot a triangle at $(4\frac{1}{2}, 1)$.



Name	Date

Use a ruler on the grid below to construct the axes for a coordinate plane. The x-axis should intersect points L and M. Construct the y-axis so that it contains points K and L. Label each axis.



- a. Place a hash mark on each grid line on the *x* and *y*-axis.
- b. Label each hash mark so that A is located at (1, 1).
- c. Plot the following points:

Point	<i>x</i> -coordinate	<i>y</i> -coordinate
В	$\frac{1}{4}$	0
С	$1\frac{1}{4}$	$\frac{3}{4}$



Lesson 3: Name points using coordinate pairs, and use the coordinate pairs to plot points.



Name .	Date				
- atima	itima and Rihana are playing Battleship. They labeled their axes using just whole numbers.				
a.	Fatima's first guess is (2, 2). Rihana says, "Hit!" Give the coordinates of four points that Fatima might guess next.				
b.	Rihana says, "Hit!" for the points directly above and below (2, 2). What are the coordinates that Fatima guessed?				



Lesson 4: Name points using coordinate pairs, and use the coordinate pairs to plot points.

Name

Date _____

- 1. Use a straightedge to construct a line that goes through points A and B. Label the line ℓ .
- 2. Which axis is parallel to line ℓ ?

Which axis is perpendicular to line ℓ ?

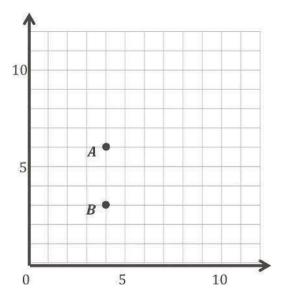
- 3. Plot two more points on line ℓ . Name them C and D.
- 4. Give the coordinates of each point below.

A: _____

B: _____

C: _____

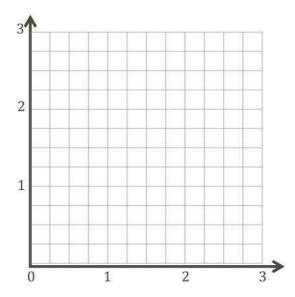
D: _____



5. Give the coordinates of another point that falls on line ℓ with a y-coordinate greater than 20.

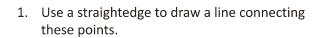
Name Date

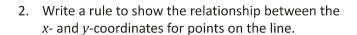
- 1. Plot the point $H(2\frac{1}{2}, 1\frac{1}{2})$.
- 2. Line ℓ passes through point H and is parallel to the y-axis. Construct line ℓ .
- 3. Construct line m such that the y-coordinate of every point is $\frac{3}{4}$.
- 4. Line *m* is _____ units from the *x*-axis.
- 5. Give the coordinates of the point on line m that is $\frac{1}{2}$ unit from the y-axis.
- 6. With a blue pencil, shade the portion of the plane that is less than $\frac{3}{4}$ unit from the x-axis.
- 7. With a red pencil, shade the portion of the plane that is less than $2\frac{1}{2}$ units from the *y*-axis.
- 8. Plot a point that lies in the double-shaded region. Give the coordinates of the point.

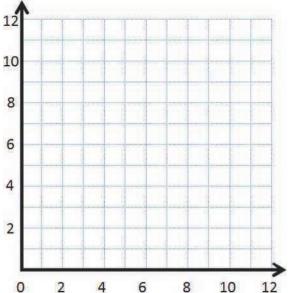


Complete the table. Then, plot the points on the coordinate plane.

X	у	(x, y)
0	4	
2	6	
3	7	
7	11	



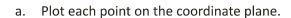


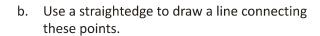


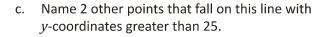
3. Name two other points that are also on this line. _____

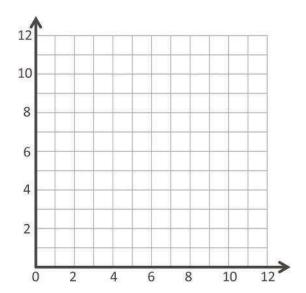
Complete this table with values for y such that each y-coordinate is 5 more than its corresponding x-coordinate.

X	У	(x, y)
0		
2		
3.5		









d. Write the rule that represents the relationship between x and y as an equation.



Lesson 8:

Generate a number pattern from a given rule, and plot the points.

Complete the table for the given rules. Then, construct lines ℓ and m on the coordinate plane.

Line ℓ

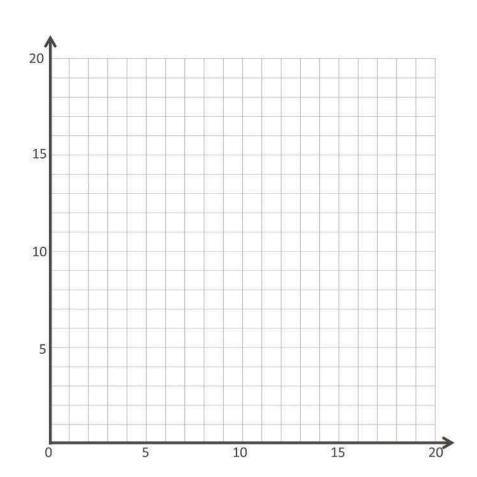
Rule: y is 5 more than x

X	у	(x, y)
0		
1		
2		
4		

Line *m*

Rule: y is 5 times as much as x

X	у	(x, y)
0		
1		
2		
4		



Write the rules for both lines as equations.



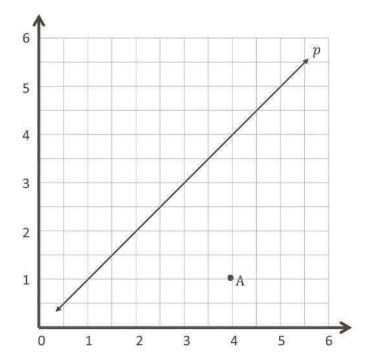
Lesson 9:

Generate two number patterns from given rules, plot the points, and analyze the patterns.



Use the coordinate plane below to complete the following tasks.

- a. Line *p* represents the rule *x* and *y* are equal.
- b. Construct a line, a, that is parallel to line p and contains point A.
- c. Name 3 points on line a.
- d. Identify a rule to describe line a.





1. Complete the tables for the given rules.

Line ℓ

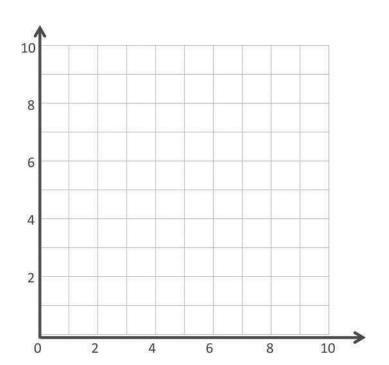
Rule: Triple x

X	У	(x, y)
0		
1		
2		
3		

Line m

Rule: *Triple x, and then* add 1

X	У	(x, y)
0		
1		
2		
3		



- Draw each line on the coordinate plane above.
- b. Compare and contrast these lines.
- 2. Circle the point(s) that the line for the rule multiply x by $\frac{1}{3}$, and then add 1 would contain.
 - $(0,\frac{1}{2})$

- $(1, 1\frac{1}{3})$ $(2, 1\frac{2}{3})$ $(3, 2\frac{1}{2})$



Lesson 11:

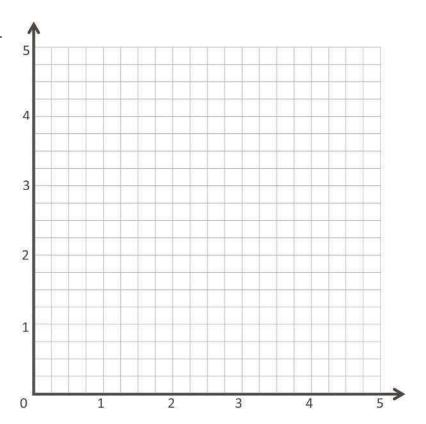
Analyze number patterns created from mixed operations.

Write the rule for the line that contains the points (0, $1\frac{1}{2}$) and ($1\frac{1}{2}$, 3).

a. Identify 2 more points on this line. Draw the line on the grid.

Point	X	у	(x, y)
В			
С			

b. Write a rule for a line that is parallel to \overrightarrow{BC} and goes through point $(1, \frac{1}{2})$.

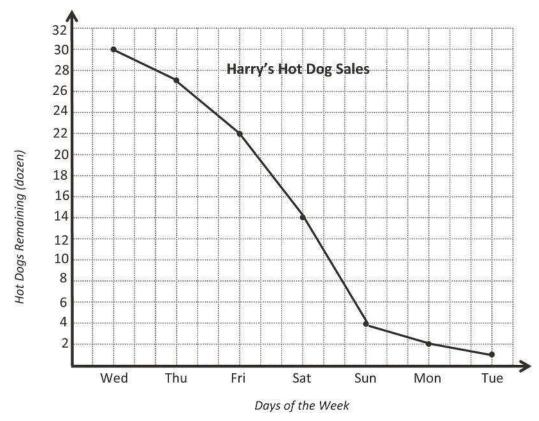




Lesson 12: Create a rule to generate a number pattern, and plot the points.

Use the following information to complete the line graph below. Then, answer the questions that follow.

Harry runs a hot dog stand at the county fair. When he arrived on Wednesday, he had 38 dozen hot dogs for his stand. The graph shows the number of hot dogs (in dozens) that remained unsold at the end of each day of sales.



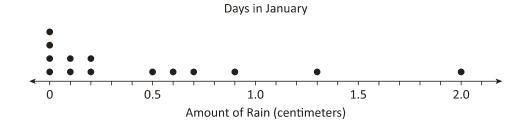
- a. How many dozen hot dogs did Harry sell on Wednesday? How do you know?
- b. Between which two-day period did the number of hot dogs sold change the most? Explain how you determined your answer.
- c. During which three days did Harry sell the most hot dogs?
- d. How many dozen hot dogs were sold on these three days?



Lesson 13: Use coo

Use coordinate systems to solve real-world problems.

Brett measures the amount of rain each day during the first 14 days of January. The dot plot represents the amount of rain in centimeters.



a. How many days during the first 14 days of January had no rain?

b. What fraction of the days had less than half of a centimeter of rain?

c. On January 15, Brett measures 1.8 cm of rain. Add a dot for this rainfall amount to the dot plot.



Lesson 14: Collect and represent data using dot plots.

Name	Date

The stem-and-leaf plots show the heights, in inches, of two different groups of tomato plants.

Group A Tomato Plant Heights (inches)

Stem	Leaf
4	9
5	2 7®9 0 0 1 1 3
6	00113
7	0

6|1 means 61 inches

Group B Tomato Plant Heights (inches)

Stem	Leaf
4	9
5	2 7 8 9 0 0 1 1 3
6	00113
7	0

6|1 means 6.1 inches

1. What does the circled number represent in each stem-and-leaf plot?

2. In the Group A stem-and-leaf plot, how many tomato plants are at least 60 inches tall?

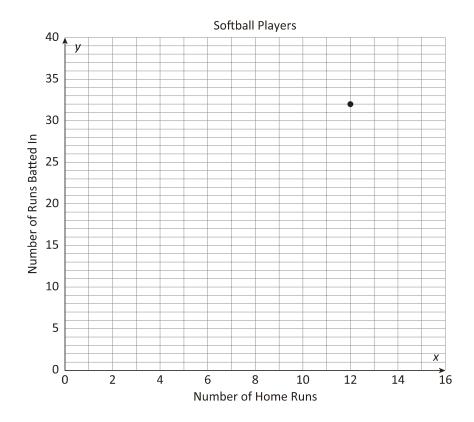
3. Another tomato plant is 6.2 inches tall. How would you represent this in the Group B stem-and-leaf plot?





Mrs. Banks coaches a softball team. She records the number of home runs and the number of runs batted in for each player. The scatterplot shows the data for one of the players.

a. What does the point on the scatterplot represent?



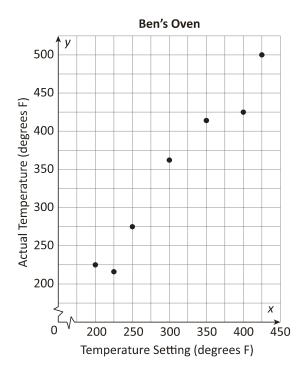
b. Complete the scatterplot by using the data for the other 9 players.

Home Runs, x	8	11	7	6	8	2	4	15	10
Runs Batted In, y	25	35	16	22	14	12	18	35	20



Lesson 16: Collect and represent discrete paired data on a scatterplot.

Ben is a baker. He notices his baked goods seem to be baking quickly and wonders if his oven is functioning properly. He measures the actual temperature inside his oven at a variety of temperature settings and displays the data in a scatterplot.



a. Is there a relationship between the temperature setting and the actual temperature inside Ben's oven? Explain.

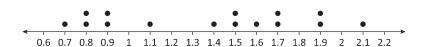
b. Is Ben's oven working properly? Explain.

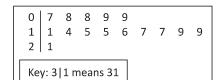


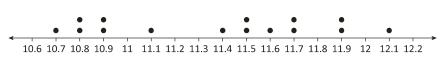
EUREKA MATH° TEKS EDITION Name _____

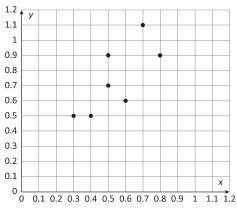
Date _____

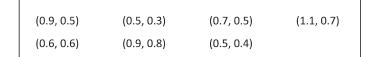
Match each data set or display on the left with a data set or display on the right.

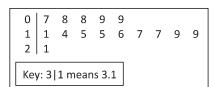




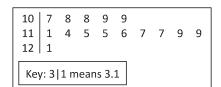


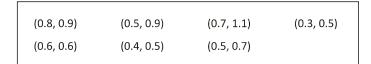


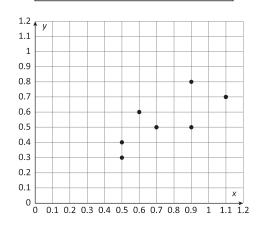














Lesson 18: Solve problems using data.

Name	Date

Kenny plotted the following pairs of points and said they made a symmetric figure about a line with the rule:

y is always 4.

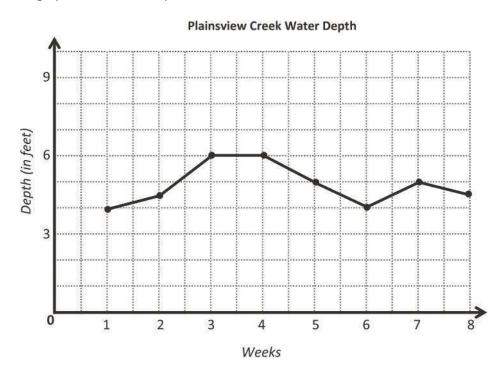
- (3, 2) and (3, 6)
- (4, 3) and (5, 5)
- $(5, \frac{3}{4})$ and $(5, 7\frac{1}{4})$
- $(7, 1\frac{1}{2})$ and $(7, 6\frac{1}{2})$

Is his figure symmetrical about the line? How do you know?





The line graph below tracks the water level of Plainsview Creek, measured each Sunday, for 8 weeks. Use the information in the graph to answer the questions that follow.



- a. About how many feet deep was the creek in Week 1?
- b. According to the graph, which week had the greatest change in water depth?
- c. It rained hard throughout the sixth week. During what other weeks might it have rained? Explain why you think so.
- d. What might have been another cause leading to an increase in the depth of the creek?