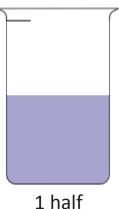
Grade 3 Math Module 5 Lessons 1-13

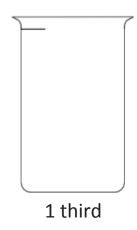
School:	
Teacher:	
Student:	

Name	Date

1. A beaker is considered full when the liquid reaches the fill line shown near the top. Estimate the amount of water in the beaker by shading the drawing as indicated. The first one is done for you.

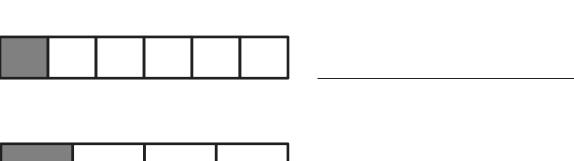


1 fourth

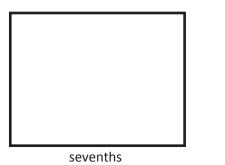


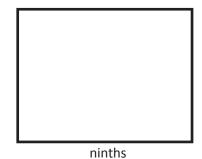
2. Juanita cut her string cheese into equal pieces as shown in the rectangles below. In the blanks below, name the fraction of the string cheese represented by the shaded part.

		•	



- 3. a. In the space below, draw a small rectangle. Estimate to split it into 2 equal parts. How many lines did you draw to make 2 equal parts? What is the name of each fractional unit?
 - b. Draw another small rectangle. Estimate to split it into 3 equal parts. How many lines did you draw to make 3 equal parts? What is the name of each fractional unit?
 - c. Draw another small rectangle. Estimate to split it into 4 equal parts. How many lines did you draw to make 4 equal parts? What is the name of each fractional unit?
- 4. Each rectangle represents 1 sheet of paper.
 - a. Estimate to show how you would cut the paper into fractional units as indicated below.

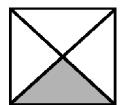




- b. What do you notice? How many lines do you think you would draw to make a rectangle with 20 equal parts?
- 5. Rochelle has a strip of wood 12 inches long. She cuts it into pieces that are each 6 inches in length. What fraction of the wood is one piece? Use your yellow strip from the lesson to help you. Draw a picture to show the piece of wood and how Rochelle cut it.

Name	Date

1. Name the fraction that is shaded.



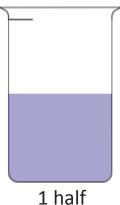
2. Estimate to partition the rectangle into thirds.



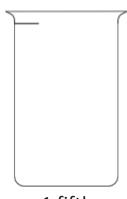
3. A plumber has 12 feet of pipe. He cuts it into pieces that are each 3 feet in length. What fraction of the pipe would one piece represent? (Use your strip from the lesson to help you.)

Name	Date	

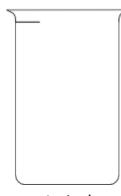
1. A beaker is considered full when the liquid reaches the fill line shown near the top. Estimate the amount of water in the beaker by shading the drawing as indicated. The first one is done for you.











1 sixth

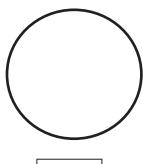
2. Danielle cut her candy bar into equal pieces as shown in the rectangles below. In the blanks below, name the fraction of candy bar represented by the shaded part.



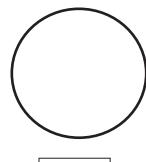




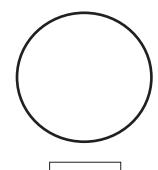
3. Each circle represents 1 whole pie. Estimate to show how you would cut the pie into fractional units as indicated below.



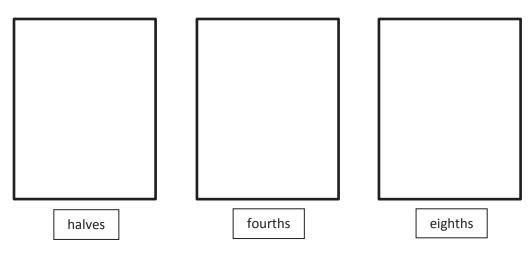
halves



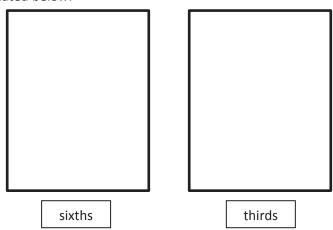
thirds



sixths



5. Each rectangle represents 1 sheet of paper. Estimate to draw lines to show how you would cut the paper into fractional units as indicated below.

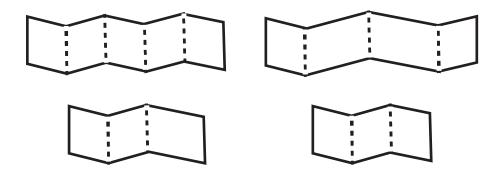


6. Yuri has a rope 12 meters long. He cuts it into pieces that are each 2 meters long. What fraction of the rope is one piece? Draw a picture. (You might fold a strip of paper to help you model the problem.)

7. Dawn bought 12 grams of chocolate. She ate half of the chocolate. How many grams of chocolate did she eat?

|--|

1. Circle the strips that are folded to make equal parts.



2.



a. There are _____ equal parts in all. _____ are shaded.



b. There are _____ equal parts in all. _____ are shaded.



c. There are _____ equal parts in all. _____ are shaded.



d. There are _____ equal parts in all. _____ are shaded.

Use your fraction strips as tools to help you solve the following problems.

3. Noah, Pedro, and Sharon share a whole candy bar fairly. Which of your fraction strips shows how they each get an equal part? Draw the candy bar below. Then, label Sharon's fraction of the candy bar.

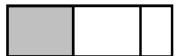
- 4. To make a garage for his toy truck, Zeno bends a rectangular piece of cardboard in half. He then bends each half in half again. Which of your fraction strips best matches this story?
 - a. What fraction of the original cardboard is each part? Draw and label the matching fraction strip below.

b. Zeno bends a different piece of cardboard in thirds. He then bends each third in half again. Which of your fraction strips best matches this story? Draw and label the matching fraction strip in the space below.



Name _____ Date _____

1. Circle the model that correctly shows 1 third shaded.







2.



There are _____ equal parts in all. _____ are shaded.

3. Michael bakes a piece of garlic bread for dinner. He shares it equally with his 3 sisters. Show how Michael and his 3 sisters can each get an equal share of the garlic bread.

Na	me		Date
1.	Cir	cle the strips that are cut into equal parts.	
2.			
	a.	There are equal parts in all	is shaded.
	b.	There are equal parts in all	is shaded.
	c.	There are equal parts in all	is shaded.
	d.	There are equal parts in all	are shaded.

3. Dylan plans to eat 1 fifth of his candy bar. His 4 friends want him to share the rest equally. Show how Dylan and his friends can each get an equal share of the candy bar.

- 4. Nasir baked a pie and cut it in fourths. He then cut each piece in half.
 - a. What fraction of the original pie does each piece represent?

b. Nasir ate 1 piece of pie on Tuesday and 2 pieces on Wednesday. What fraction of the original pie was not eaten?



A

Correct ____

	Multiply.	<u> </u>			
1	1 x 6 =	23	3	10 x 6 =	
2	6 x 1 =	24	4	9 x 6 =	
3	2 x 6 =	25	5	4 x 6 =	
4	6 x 2 =	26	6	8 x 6 =	
5	3 x 6 =	27	7	6 x 3 =	
6	6 x 3 =	28	8	7 x 6 =	
7	4 x 6 =	29	9	6 x 6 =	
8	6 x 4 =	30	0	6 x 10 =	
9	5 x 6 =	3.	1	6 x 5 =	
10	6 x 5 =	32	2	6 x 4 =	
11	6 x 6 =	33	3	6 x 1 =	
12	7 x 6 =	34	4	6 x 9 =	
13	6 x 7 =	35	5	6 x 6 =	
14	8 x 6 =	36	6	6 x 3 =	
15	6 x 8 =	37	7	6 x 2 =	
16	9 x 6 =	38	8	6 x 7 =	
17	6 x 9 =	39	9	6 x 8 =	
18	10 x 6 =	40	0	11 x 6 =	
19	6 x 10 =	4	1	6 x 11 =	
20	6 x 3 =	42	2	12 x 6 =	
21	1 x 6 =	43	3	6 x 12 =	
22	2 x 6 =	44	4	13 x 6 =	

В	Multiply.	Improvement	t	# Correct
1	6 x 1 =	23	9 x 6 =	
2	1 x 6 =	24	3 x 6 =	
3	6 x 2 =	25	8 x 6 =	
4	2 x 6 =	26	4 x 6 =	
5	6 x 3 =	27	7 x 6 =	
6	3 x 6 =	28	5 x 6 =	
7	6 x 4 =	29	6 x 6 =	
8	4 x 6 =	30	6 x 5 =	
9	6 x 5 =	31	6 x 10 =	
10	5 x 6 =	32	6 x 1 =	
11	6 x 6 =	33	6 x 6 =	
12	6 x 7 =	34	6 x 4 =	
13	7 x 6 =	35	6 x 9 =	
14	6 x 8 =	36	6 x 2 =	
15	8 x 6 =	37	6 x 7 =	
16	6 x 9 =	38	6 x 3 =	
17	9 x 6 =	39	6 x 8 =	
18	6 x 10 =	40	11 x 6 =	
19	10 x 6 =	41	6 x 11 =	
20	1 x 6 =	42	12 x 6 =	
21	10 x 6 =	43	6 x 12 =	
22	2 x 6 =	44	13 x 6 =	



Name _____

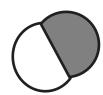
Date _____

1. Each shape is a whole divided into equal parts. Name the fractional unit, and then count and tell how many of those units are shaded. The first one is done for you.







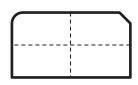


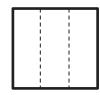
Fourths

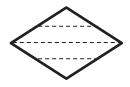
2 fourths are shaded.

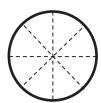
2. Circle the shapes that are divided into equal parts. Write a sentence telling what equal parts means.



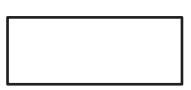




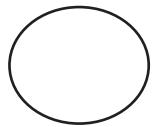




3. Each shape is 1 whole. Estimate to divide each into 4 equal parts. Name the fractional unit below.





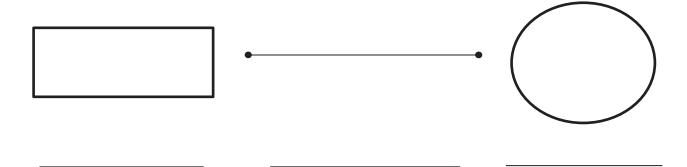


Fractional unit: _

4. Each shape is 1 whole. Divide and shade to show the given fraction.

1 half 1 third 1 sixth

5. Each shape is 1 whole. Estimate to divide each into equal parts (do not draw fourths). Divide each whole using a different fractional unit. Write the name of the fractional unit on the line below the shape.



6. Charlotte wants to equally share a candy bar with 4 friends. Draw Charlotte's candy bar. Show how she can divide her candy bar so everyone gets an equal share. What fraction of the candy bar does each person receive?

Each person receives ____

Name	Date
·	



2. Circle the shapes that are divided into equal parts.





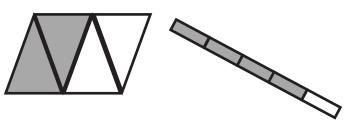


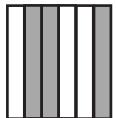
3. Steven wants to equally share his pizza with his 3 sisters. What fraction of the pizza does he and each sister receive?

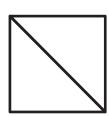
He and each sister receive _____

Name	Date
INATITE	Date

1. Each shape is a whole divided into equal parts. Name the fractional unit, and then count and tell how many of those units are shaded. The first one is done for you.



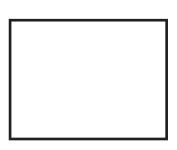




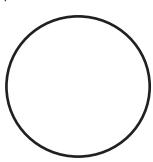
Fourths

2 fourths are shaded.

2. Each shape is 1 whole. Estimate to divide each into equal parts. Divide each whole using a different fractional unit. Write the name of the fractional unit on the line below the shape.







3. Anita uses 1 sheet of paper to make a calendar showing each month of the year. Draw Anita's calendar. Show how she can divide her calendar so that each month is given the same space. What fraction of the calendar does each month receive?

Each month receives ______.

A

Correct

A	Multiply or divide.		,	# Correct
1	2 x 6 =	23	x 6 = 60	
2	3 x 6 =	24	x 6 =12	
3	4 x 6 =	25	x 6 = 18	
4	5 x 6 =	26	60 ÷ 6 =	
5	1 x 6 =	27	30 ÷ 6 =	
6	12 ÷ 6 =	28	6 ÷ 6 =	
7	18 ÷ 6 =	29	12 ÷ 6 =	
8	30 ÷ 6 =	30	18 ÷ 6 =	
9	6 ÷ 6 =	31	x 6 = 36	
10	24 ÷ 6 =	32	x 6 = 42	
11	6 x 6 =	33	x 6 = 54	
12	7 x 6 =	34	x 6 = 48	
13	8 x 6 =	35	42 ÷ 6 =	
14	9 x 6 =	36	54 ÷ 6 =	
15	10 x 6 =	37	36 ÷ 6 =	
16	48 ÷ 6 =	38	48 ÷ 6 =	
17	42 ÷ 6 =	39	11 x 6 =	
18	54 ÷ 6 =	40	66 ÷ 6 =	
19	36 ÷ 6 =	41	12 x 6 =	
20	60 ÷ 6 =	42	72 ÷ 6 =	
21	x 6 = 30	43	14 x 6 =	
22	x6 = 6	44	84 ÷ 6 =	

В	Improvement	# Correct
Multiply or divide.		

	Multiply or divide.			
1	1 x 6 =	23	x 6 = 12	
2	2 x 6 =	24	x 6 = 60	
3	3 x 6 =	25	x 6 = 18	
4	4 x 6 =	26	12 ÷ 6 =	
5	5 x 6 =	27	6 ÷ 6 =	
6	18 ÷ 6 =	28	60 ÷ 6 =	
7	12 ÷ 6 =	29	30 ÷ 6 =	
8	24 ÷ 6 =	30	18 ÷ 6 =	
9	6 ÷ 6 =	31	x 6 = 18	
10	30 ÷ 6 =	32	x 6 = 24	
11	10 x 6 =	33	x 6 = 54	
12	6 x 6 =	34	x 6 = 42	
13	7 x 6 =	35	48 ÷ 6 =	
14	8 x 6 =	36	54 ÷ 6 =	
15	9 x 6 =	37	36 ÷ 6 =	
16	42 ÷ 6 =	38	42 ÷ 6 =	
17	36 ÷ 6 =	39	11 x 6 =	
18	48 ÷ 6 =	40	66 ÷ 6 =	
19	60 ÷ 6 =	41	12 x 6 =	
20	54 ÷ 6 =	42	72 ÷ 6 =	
21	x 6 = 6	43	13 x 6 =	
22	x 6 = 30	44	78 ÷ 6 =	

Name	Date	

1. Draw a picture of the yellow strip at 3 (or 4) different stations. Shade and label 1 fractional unit of each.

2. Draw a picture of the brown bar at 3 (or 4) different stations. Shade and label 1 fractional unit of each.

3. Draw a picture of the square at 3 (or 4) different stations. Shade and label 1 fractional unit of each.

4. Draw a picture of the clay at 3 (or 4) different stations. Shade and label 1 fractional unit of each.

5. Draw a picture of the water at 3 (or 4) different stations. Shade and label 1 fractional unit of each.

6. Extension: Draw a picture of the yarn at 3 (or 4) different stations.



Name	Date

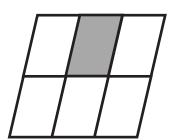
Each shape is 1 whole. Estimate to equally partition the shape and shade to show the given fraction.

1. 1 fourth



2. 1 fifth

3. The shape represents 1 whole. Write the fraction for the shaded part.



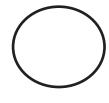
The shaded part is

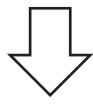
Name _____

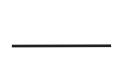
Date _____

Each shape is 1 whole. Estimate to equally partition the shape and shade to show the given fraction.

1. 1 half





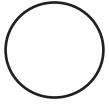


С



D

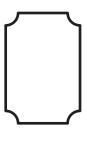
2. 1 fourth



Α



В

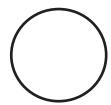


C

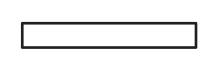


D

3. 1 third



Α



В



С



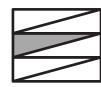
D

4. Each of the shapes represents 1 whole. Match each shape to its fraction.

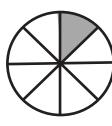
1 fifth



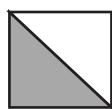
1 twelfth



1 third



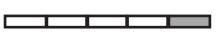
1 fourth



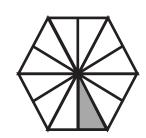
1 half



1 eighth



1 tenth

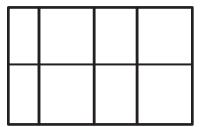


1 sixth

1. Fill in the chart. Then, whisper the fractional unit.

	Total Number of Equal Parts	Total Number of Equal Parts Shaded	Unit Form	Fraction
a.				
b.				
c.				
d.				
e.				
f.				

2. Andre's mom baked his 2 favorite cakes for his birthday party. The cakes were the exact same size. Andre cut his first cake into 8 pieces for him and his 7 friends. The picture below shows how he cut it. Did Andre cut the cake into eighths? Explain your answer.



3. Two of Andre's friends came late to his party. They decide they will all share the second cake. Show how Andre can slice the second cake so that he and his nine friends can each get an equal amount with none leftover. What fraction of the second cake will they each receive?



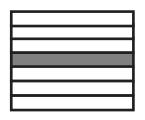
4. Andre thinks it's strange that $\frac{1}{10}$ of the cake would be less than $\frac{1}{8}$ of the cake, since ten is bigger than eight. To explain to Andre, draw 2 identical rectangles to represent the cakes. Show 1 tenth shaded on one and 1 eighth shaded on the other. Label the unit fractions and explain to him which slice is bigger.

Name	Date	

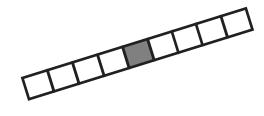
1. Fill in the chart.

Total Number of Equal Parts	Total Number of Equal Parts Shaded	Unit Form	Fraction

2. Each image below is 1 whole. Write the fraction that is shaded.







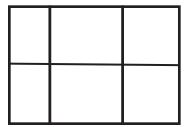
3. Draw two identical rectangles. Partition one into 5 equal parts. Partition the other rectangle into 8 equal parts. Label the unit fractions and shade 1 equal part in each rectangle. Use your rectangles to explain why

 $\frac{1}{5}$ is bigger than $\frac{1}{8}$.

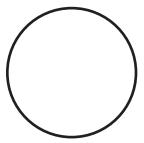
1. Fill in the chart. Then, whisper the fractional unit.

	Total Number of Equal Parts	Total Number of Equal Parts Shaded	Unit Form	Fraction
a.				
b.				
C.				
d.				
e				

2. This figure is divided into 6 parts. Are they sixths? Explain your answer.



3. Terry and his 3 friends baked a pizza during his sleepover. They want to share the pizza equally. Show how Terry can slice the pizza so that he and his 3 friends can each get an equal amount with none left over.



4. Draw two identical rectangles. Shade 1 seventh of one rectangle and 1 tenth of the other. Label the unit fractions. Use your rectangles to explain why $\frac{1}{7}$ is greater than $\frac{1}{10}$.

Α

Correct _____

	Multiply.				
1	1 x 7 =	2	23	10 x 7 =	
2	7 x 1 =	2	24	9 x 7 =	
3	2 x 7 =	2	25	4 x 7 =	
4	7 x 2 =	2	26	8 x 7 =	
5	3 x 7 =	2	27	7 x 3 =	
6	7 x 3 =	2	28	7 x 7 =	
7	4 x 7 =	2	29	6 x 7 =	
8	7 x 4 =	3	30	7 x 10 =	
9	5 x 7 =	3	31	7 x 5 =	
10	7 x 5 =	3	32	7 x 6 =	
11	6 x 7 =	3	33	7 x 1 =	
12	7 x 6 =	3	34	7 x 9 =	
13	7 x 7 =	3	35	7 x 4 =	
14	8 x 7 =	3	36	7 x 3 =	
15	7 x 8 =	3	37	7 x 2 =	
16	9 x 7 =	3	38	7 x 7 =	
17	7 x 9 =	3	39	7 x 8 =	
18	10 x 7 =		40	11 x 7 =	
19	7 x 10 =		41	7 x 11 =	
20	7 x 3 =		42	12 x 7 =	
21	1 x 7 =		43	7 x 12 =	
22	2 x 7 =		44	13 x 7 =	

В		Improvement	# Correct
	Multiply		

	Multiply.	•		
1	7 x 1 =	23	9 x 7 =	
2	1 x 7 =	24	3 x 7 =	
3	7 x 2 =	25	8 x 7 =	
4	2 x 7 =	26	4 x 7 =	
5	7 x 3 =	27	7 x 7 =	
6	3 x 7 =	28	5 x 7 =	
7	7 x 4 =	29	6 x 7 =	
8	4 x 7 =	30	7 x 5 =	
9	7 x 5 =	31	7 x 10 =	
10	5 x 7 =	32	7 x 1 =	
11	7 x 6 =	33	7 x 6 =	
12	6 x 7 =	34	7 x 4 =	
13	7 x 7 =	35	7 x 9 =	
14	7 x 8 =	36	7 x 2 =	
15	8 x 7 =	37	7 x 7 =	
16	7 x 9 =	38	7 x 3 =	
17	9 x 7 =	39	7 x 8 =	
18	7 x 10 =	40	11 x 7 =	
19	10 x 7 =	41	7 x 11 =	
20	1 x 7 =	42	12 x 7 =	
21	10 x 7 =	43	7 x 12 =	
22	2 x 7 =	44	13 x 7 =	

Name

1. Complete the number sentence. Estimate to partition each strip equally, write the unit fraction inside each unit, and shade the answer.

Sample:

2 thirds =
$$\frac{2}{3}$$

1	1	1
_	_	<u> </u>
3	3	3

2	2	fourths	_
a.	3	Tourtis	=

- 2. Mr. Stevens bought 8 liters of soda for a party. His guests drank 1 liter.
 - a. What fraction of the soda did his guests drink?

b. What fraction of the soda was left?

3. Fill in the chart.

	Total Number of Equal Parts	Total Number of Shaded Equal Parts	Unit Fraction	Fraction Shaded
Sample:	4	3	$\frac{1}{4}$	$\frac{3}{4}$
a.				
b.				
c.				
d.				
e.				

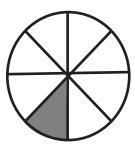
Name	Date	

1. Complete the number sentence. Estimate to partition the strip equally. Write the unit fraction inside each unit. Shade the answer.

2 fifths =



2.



- a. What fraction of the circle is shaded?
- b. What fraction of the circle is not shaded?

3. Complete the chart.

Total Number of Equal Parts	Total Number of Shaded Equal Parts	Unit Fraction	Fraction Shaded

Name _____

Date _____

1. Complete the number sentence. Estimate to partition each strip equally, write the unit fraction inside each unit, and shade the answer.

Sample:

3 fourths =
$$\frac{3}{4}$$

1	1 1	1 1	1
_	_	_	
4	4	4	4

	_				
a.	2	tr	niro	2¢	=





Ч	2	aighthe -
a.		eighths =



- 2. Mr. Abney bought 6 kilograms of rice. He cooked 1 kilogram of it for dinner.
 - a. What fraction of the rice did he cook for dinner?
 - b. What fraction of the rice was left?

3. Fill in the chart.

	Total Number of Equal Parts	Total Number of Shaded Equal Parts	Unit Fraction	Fraction Shaded
Sample:	6	5	$\frac{1}{6}$	<u>5</u>
a.				
b.				
c.				
d.				

Α

Correct _____

^	Multiply or divide.			# Correct
1	2 x 7 =	23	x 7 = 70	
2	3 x 7 =	24	x 7 = 14	
3	4 x 7 =	25	x 7 = 21	
4	5 x 7 =	26	70 ÷ 7 =	
5	1 x 7 =	27	35 ÷ 7 =	
6	14 ÷ 7 =	28	7 ÷ 7 =	
7	21 ÷ 7 =	29	14 ÷ 7 =	
8	35 ÷ 7 =	30	21 ÷ 7 =	
9	7 ÷ 7 =	31	x 7 = 42	
10	28 ÷ 7 =	32	x 7 = 49	
11	6 x 7 =	33	x 7 = 63	
12	7 x 7 =	34	x 7 = 56	
13	8 x 7 =	35	49 ÷ 7 =	
14	9 x 7 =	36	63 ÷ 7 =	
15	10 x 7 =	37	42 ÷ 7 =	
16	56 ÷ 7 =	38	56 ÷ 7 =	
17	49 ÷ 7 =	39	11 x 7 =	
18	63 ÷ 7 =	40	77 ÷ 7 =	
19	42 ÷ 7 =	41	12 x 7 =	
20	70 ÷ 7 =	42	84 ÷ 7 =	
21	x 7 = 35	43	14 x 7 =	
22	x 7 = 7	44	98 ÷ 7 =	

В	Improvement	# Correct

	Multiply or divide.	(#)			
1	1 x 7 =		23	x 7 = 14	
2	2 x 7 =	3	24	x 7 = 70	
3	3 x 7 =		25	x 7 = 21	
4	4 x 7 =		26	14 ÷ 7 =	
5	5 x 7 =		27	7 ÷ 7 =	
6	21 ÷ 7 =		28	70 ÷ 7 =	
7	14 ÷ 7 =	4.5	29	35 ÷ 7 =	
8	28 ÷ 7 =		30	21 ÷ 7 =	
9	7 ÷ 7 =		31	x 7 = 21	
10	35 ÷ 7 =		32	x 7 = 28	
11	10 x 7 =	2 2	33	x 7 = 63	
12	6 x 7 =		34	x 7 = 49	
13	7 x 7 =	8	35	56 ÷ 7 =	
14	8 x 7 =		36	63 ÷ 7 =	
15	9 x 7 =		37	42 ÷ 7 =	
16	49 ÷ 7 =	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	38	49 ÷ 7 =	
17	42 ÷ 7 =		39	11 x 7 =	
18	56 ÷ 7 =		40	77 ÷ 7 =	
19	70 ÷ 7 =	5	41	12 x 7 =	
20	63 ÷ 7 =	3	42	84 ÷ 7 =	
21	x 7 = 7		43	13 x 7 =	
22	x 7 = 35	9	44	91 ÷ 7 =	

Whisper the fraction of the shape that is shaded. Then, match the shape to the amount that is <u>not</u> shaded.

1.



2 thirds

2.



6 sevenths

3.



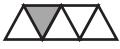
4 fifths

4.



8 ninths

5.



1 half

6.



5 sixths

7.



7 eighths

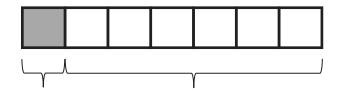
8.

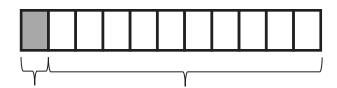


3 fourths

- 9. a. How many eighths are in 1 whole? _____
 - b. How many ninths are in 1 whole? _____
 - c. How many twelfths are in 1 whole? _____
- 10. Each strip represents 1 whole. Write a fraction to label the shaded and unshaded parts.





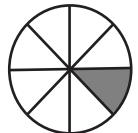


11. Avanti read 1 sixth of her book. What fraction of the book has she not read yet?

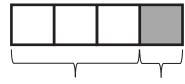
Date _____

1. Write the fraction that is <u>not</u> shaded.





3. The fraction strip is 1 whole. Write fractions to label the shaded and unshaded parts.



4. Justin mows part of his lawn. Then, his lawnmower runs out of gas. He has not mowed $\frac{9}{10}$ of the lawn. What part of his lawn is mowed?

Name	Date

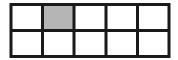
Whisper the fraction of the shape that is shaded. Then, match the shape to the amount that is <u>not</u> shaded.

1.



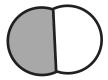
9 tenths

2.



4 fifths

3.



10 elevenths

4.



5 sixths

5.



1 half

6.



2 thirds

7.



3 fourths

8.

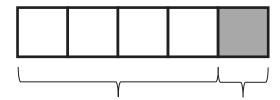


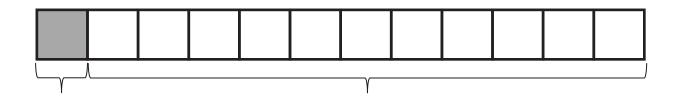
6 sevenths

Lesson 7:

Identify and represent shaded and non-shaded parts of one whole as fractions.

9. Each strip represents 1 whole. Write a fraction to label the shaded and unshaded parts.





10. Carlia finished 1 fourth of her homework on Saturday. What fraction of her homework has she not finished? Draw and explain.

11. Jerome cooks 8 cups of oatmeal for his family. They eat 7 eighths of the oatmeal. What fraction of the oatmeal is uneaten? Draw and explain.

Α,	Vrite the fraction that is shaded.			# C	orrect
1		1	23	\oplus	1
2		1	24	\oplus	1
3		1	25	\oplus	1
4	\ominus	1	26		1
5	\bigcirc	1	27		1
6		1	28	\otimes	1
7	\Box	1	29		1
8	\bigcirc	1	30	\otimes	1
9		1	31		1
10	\ominus	1	32	\otimes	1
11		1	33		1
12		1	34	\otimes	1
13		1	35		1
14		1	36		1
15		1	37		1
16		1	38		1
17		1	39		1
18	lacksquare	1	40		1
19	\oplus	1	41		1
20	Φ	1	42		1
21	\oplus	1	43	\otimes	1
22	\oplus	1	44	\otimes	1



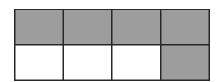
Lesson 8: Represent parts of one whole as fractions with number bonds.

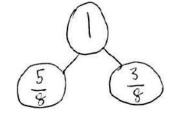
В		Improveme	nt	# Co	orrect
Write t	he fraction that is sha	ded.			
1	Ψ	1	23	Ψ	/
2	\bigcirc	1	24	lacksquare	1
3		1	25	igoplus	1
4	\ominus	1	26		1
5		1	27		1
6		1	28		1
7		1	29	\otimes	1
8	\bigcirc	1	30		1
9		1	31	\otimes	/
10	\bigcirc	1	32		/
11		1	33	\otimes	1
12		/	34		1
13		1	35	\otimes	1
14		1	36		1
15		1	37		1
16		1	38		1
17		1	39		1
18	\oplus	1	40		1
19	\oplus	1	41		1
20	\oplus	1	42		1
21	\oplus	1	43	\otimes	/
22	\oplus	1	44	\otimes	1

Date _____

Show a number bond representing what is shaded and unshaded in each of the figures. Draw a different visual model that would be represented by the same number bond.

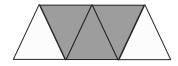
Sample:



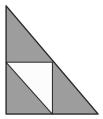




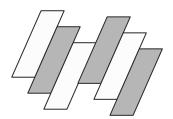
1.



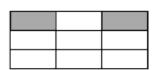
2.



3.



4.



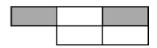
5. Draw a number bond with 2 parts showing the shaded and unshaded fractions of each figure. Decompose both parts of the number bond into unit fractions.

a.









6. The chef put $\frac{1}{4}$ of the ground beef on the grill to make one hamburger and put the rest in the refrigerator. Draw a 2-part number bond showing the fraction of the ground beef on the grill and the fraction in the refrigerator. Draw a visual model of all the ground beef. Shade what is in the refrigerator.

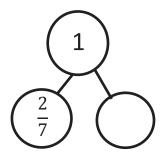
- a. What fraction of the ground beef was in the refrigerator?
- b. How many more hamburgers can the chef make if he makes them all the same size as the first one?
- c. Show the refrigerated ground beef broken into unit fractions on your number bond above.

Name	Date	

1. Draw a number bond that shows the shaded and the unshaded parts of the shape below. Then, show each part decomposed into unit fractions.

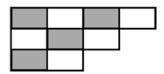


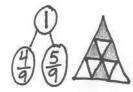
2. Complete the number bond. Draw a shape that has shaded and unshaded parts that match the completed number bond.



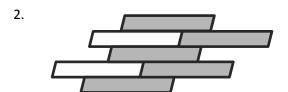
Show a number bond representing what is shaded and unshaded in each of the figures. Draw a different visual model that would be represented by the same number bond.

Sample:

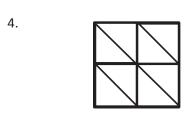




1.



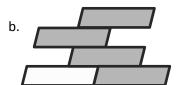
3.

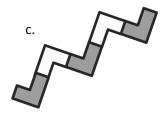


Page 48

5. Draw a number bond with 2 parts showing the shaded and unshaded fractions of each figure. Decompose both parts of the number bond into unit fractions.







6. Johnny made a square peanut butter and jelly sandwich. He ate $\frac{1}{3}$ of it and left the rest on his plate. Draw a picture of Johnny's sandwich. Shade the part he left on his plate, and then draw a number bond that matches what you drew. What fraction of his sandwich did Johnny leave on his plate?

Α

Correct

А	Multiply.			# Correct
1	8 x 1 =	23	9 x 8 =	
2	1 x 8 =	24	3 x 8 =	
3	8 x 2 =	25	8 x 8 =	
4	2 x 8 =	26	4 x 8 =	
5	8 x 3 =	27	7 x 8 =	
6	3 x 8 =	28	5 x 8 =	
7	8 x 4 =	29	6 x 8 =	
8	4 x 8 =	30	8 x 5 =	
9	8 x 5 =	31	8 x 10 =	
10	5 x 8 =	32	8 x 1 =	
11	8 x 6 =	33	8 x 6 =	
12	6 x 8 =	34	8 x 4 =	
13	8 x 7 =	35	8 x 9 =	
14	7 x 8 =	36	8 x 2 =	
15	8 x 8 =	37	8 x 7 =	
16	8 x 9 =	38	8 x 3 =	
17	9 x 8 =	39	8 x 8 =	
18	8 x 10 =	40	11 x 8 =	
19	10 x 8 =	41	8 x 11 =	
20	1 x 8 =	42	12 x 8 =	
21	10 x 8 =	43	8 x 12 =	
22	2 x 8 =	44	13 x 8 =	

В	Multiply.	Improvemer	nt	# Correct
1	1 x 8 =	23	10 x 8 =	
2	8 x 1 =	24	9 x 8 =	
3	2 x 8 =	25	4 x 8 =	
4	8 x 2 =	26	8 x 8 =	
5	3 x 8 =	27	8 x 3 =	
6	8 x 3 =	28	7 x 8 =	
7	4 x 8 =	29	6 x 8 =	
8	8 x 4 =	30	8 x 10 =	
9	5 x 8 =	31	8 x 5 =	
10	8 x 5 =	32	8 x 6 =	
11	6 x 8 =	33	8 x 1 =	
12	8 x 6 =	34	8 x 9 =	
13	7 x 8 =	35	8 x 4 =	
14	8 x 7 =	36	8 x 3 =	
15	8 x 8 =	37	8 x 2 =	
16	9 x 8 =	38	8 x 7 =	
17	8 x 9 =	39	8 x 8 =	
18	10 x 8 =	40	11 x 8 =	
19	8 x 10 =	41	8 x 11 =	
20	8 x 3 =	42	12 x 8 =	
21	1 x 8 =	43	8 x 12 =	
22	2 x 8 =	44	13 x 8 =	

Name	Date

1. Each figure represents 1 whole. Fill in the chart.

	Unit Fraction	Total Number of Units Shaded	Fraction Shaded
a. Sample:	$\frac{1}{2}$	5	<u>5</u> 2
b.			
c.			
d.			
e.			
f.			

2. Estimate to draw and shade units on the fraction strips. Solve. Sample:

5 thirds = $\frac{5}{3}$

1	1	1	
$\frac{1}{3}$	<u>-</u>	- 3	

1	1	1
- 3	3	3

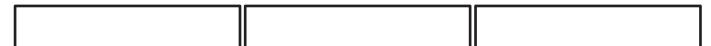
a. 8 sixths =



b. 7 fourths =







- 3. Mrs. Jawlik baked 2 pans of brownies. Draw the pans and estimate to partition each pan into 8 equal pieces.
 - a. Mrs. Jawlik's children gobbled up 10 pieces. Shade the amount that was eaten.
 - b. Write a fraction to show how many pans of brownies her children ate.

Date _____ Name _____

1. Each shape represents 1 whole. Fill in the chart.

Unit Fraction	Total Number of Units Shaded	Fraction Shaded

2. Estimate to draw and shade units on the fraction strips. Solve.

a. 4 thirds =

h	_	10
υ.	 _	4

Name	Date

1. Each shape represents 1 whole. Fill in the chart.

	Unit Fraction	Total Number of Units Shaded	Fraction Shaded
a. Sample:	$\frac{1}{2}$	3	$\frac{3}{2}$
b.			
c.			
d.			
e.			
f.			

2. Estimate to draw and shade units on the fraction strips. Solve.

Sample:

7 fourths = $\frac{7}{4}$

| $\frac{1}{4}$ |
---------------	---------------	---------------	---------------	---------------	---------------	---------------	---------------

a. 5 thirds =





3. Reggie bought 2 candy bars. Draw the candy bars and estimate to partition each bar into 4 equal pieces.

- a. Reggie ate 5 pieces. Shade the amount he ate.
- b. Write a fraction to show how many candy bars Reggie ate.

Correct _____

^	Multiply or divide.			# Odliect
1	2 x 8 =	23	x 8 = 80	
2	3 x 8 =	24	x 8 = 16	
3	4 x 8 =	25	x 8 = 24	
4	5 x 8 =	26	80 ÷ 8 =	
5	1 x 8 =	27	40 ÷ 8 =	
6	16 ÷ 8 =	28	8 ÷ 8 =	
7	24 ÷ 8 =	29	16 ÷ 8 =	
8	40 ÷ 8 =	30	24 ÷ 8 =	
9	8 ÷ 8 =	31	x 8 = 48	
10	32 ÷ 8 =	32	x 8 = 56	
11	6 x 8 =	33	x 8 = 72	
12	7 x 8 =	34	x 8 = 64	
13	8 x 8 =	35	56 ÷ 8 =	
14	9 x 8 =	36	72 ÷ 8 =	
15	10 x 8 =	37	48 ÷ 8 =	
16	64 ÷ 8 =	38	64 ÷ 8 =	
17	56 ÷ 8 =	39	11 x 8 =	
18	72 ÷ 8 =	40	88 ÷ 8 =	
19	48 ÷ 8 =	41	12 x 8 =	
20	80 ÷ 8 =	42	96 ÷ 8 =	
21	x 8 = 40	43	14 x 8 =	
22	x 8 = 8	44	112 ÷ 8 =	

В	Multiply or divide.	Improvemer	nt	# Correct
1	1 x 8 =	23	x 8 = 16	
2	2 x 8 =	24	x 8 = 80	
3	3 x 8 =	25	x 8 = 24	
4	4 x 8 =	26	16 ÷ 8 =	
5	5 x 8 =	27	8 ÷ 8 =	
6	24 ÷ 8 =	28	80 ÷ 8 =	
7	16 ÷ 8 =	29	40 ÷ 8 =	
8	32 ÷ 8 =	30	24 ÷ 8 =	
9	8 ÷ 8 =	31	x 8 = 24	
10	40 ÷ 8 =	32	x 8 = 32	
11	10 x 8 =	33	x 8 = 72	
12	6 x 8 =	34	x 8 = 56	
13	7 x 8 =	35	64 ÷ 8 =	
14	8 x 8 =	36	72 ÷8 =	
15	9 x 8 =	37	48 ÷ 8 =	
16	56 ÷ 8 =	38	56 ÷ 8 =	
17	48 ÷ 8 =	39	11 x 8 =	

FIIDEVA
EUREKA
MATH"
MAIN

18

19

20

21

22

40

41

42

43

44

88 ÷ 8 =

12 x 8 =

 $96 \div 8 =$

13 x 8 =

 $104 \div 8 =$

 $64 \div 8 =$

 $80 \div 8 =$

72 ÷8 =

x 8 = 8

x 8 = 40

Name _ Date _

1. Each fraction strip is 1 whole. All the fraction strips are equal in length. Color 1 fractional unit in each strip. Then, answer the questions below.

$\frac{1}{2}$				
$\frac{1}{4}$				
<u>1</u> 8				
$\frac{1}{3}$				
1	ĺ			

- 2. Circle *less than* or *greater than*. Whisper the complete sentence.
 - less than greater than

- less than
- greater than

6

less than

greater than

less than

greater than

1

less than

is

less than

greater than

greater than

less than

h. 9 eighths is

less than

2 halves

greater than

greater than

3. Lily needs $\frac{1}{3}$ cup of oil and $\frac{1}{4}$ cup of water to make muffins. Will Lily use more oil or more water? Explain your answer using pictures, numbers, and words.

- 4. Use >, <, or = to compare.
 - a. 1 third
- 1 fifth

- b. 1 seventh
- 1 fourth

- c. 1 sixth

- d. 1 tenth

- 1 eleventh
- f. 1 whole
- 2 halves

Extension:

- g. $\frac{1}{8}$ 1 eighth $\frac{1}{6}$ $\frac{1}{3}$ 2 halves 1 whole

- 5. Your friend Eric says that $\frac{1}{6}$ is greater than $\frac{1}{5}$ because 6 is greater than 5. Is Eric correct? Use words and pictures to explain what happens to the size of a unit fraction when the number of parts gets larger.

1. Each fraction strip is 1 whole. All the fraction strips are equal in length. Color 1 fractional unit in each strip. Then, circle the largest fraction and draw a star to the right of the smallest fraction.

$\frac{1}{4}$		
<u>1</u> 3		
1 2		

- 2. Use >, <, or = to compare.
 - a. 1 eighth

1 tenth

b. 1 whole

5 fifths

Name Date _____

1. Each fraction strip is 1 whole. All the fraction strips are equal in length. Color 1 fractional unit in each strip. Then, answer the questions below.

$\frac{1}{2}$					
<u>1</u> 3					
<u>1</u> 5					
$\frac{1}{4}$					
<u>1</u> 9					

2. Circle *less than* or *greater than*. Whisper the complete sentence.

less than greater than

less than h. 6 fifths is 3 thirds greater than

3. After his football game, Malik drinks $\frac{1}{2}$ a liter of water and $\frac{1}{3}$ of a liter of juice. Did Malik drink more water or juice? Draw and estimate to partition. Explain your answer.

- 4. Use >, <, or = to compare.
 - a. 1 fourth 1 eighth
 - b. 1 seventh 1 fifth
 - c. 1 eighth
 - d. 1 twelfth
 - 1 thirteenth
 - f. 3 thirds 1 whole
- 5. Write a word problem about comparing fractions for your friends to solve. Be sure to show the solution so that your friends can check their work.

Name Date

Label the unit fraction. In each blank, draw and label the same whole with a shaded unit fraction that makes the sentence true. There is more than 1 correct way to make the sentence true.

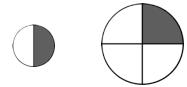
Sample: 1 4	is less than	1/2
1.	is greater than	
2.	is less than	
3.	is greater than	
4.	is less than	

5.	is greater than	
6.	is less than	
7.	is greater than	

8. Fill in the blank with a fraction to make the statement true and draw a matching model.

$\frac{1}{4}$ is	less than	$\frac{1}{2}$ is gr	reater than

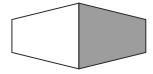
9. Robert ate $\frac{1}{2}$ of a small pizza. Elizabeth ate $\frac{1}{4}$ of a large pizza. Elizabeth says, "My piece was larger than yours, so that means $\frac{1}{4} > \frac{1}{2}$." Is Elizabeth correct? Explain your answer.



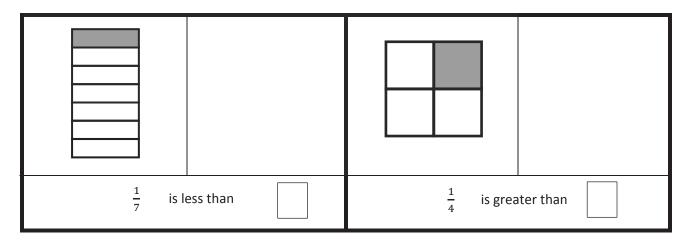
10. Manny and Daniel each ate $\frac{1}{2}$ of his candy, as shown below. Manny said he ate more candy than Daniel because his half is longer. Is he right? Explain your answer.



Daniel's candy bar



1. Fill in the blank with a fraction to make the statement true. Draw a matching model.



2. Tatiana ate $\frac{1}{2}$ of a small carrot. Louis ate $\frac{1}{4}$ of a large carrot. Who ate more? Use words and pictures to explain your answer.

Name _	Date	

Label the unit fraction. In each blank, draw and label the same whole with a shaded unit fraction that makes the sentence true. There is more than 1 correct way to make the sentence true.

Sample: $\frac{1}{3}$	is less than	$\frac{1}{2}$
1.	is greater than	
2.	is less than	
3.	is greater than	
4.	is less than	

5.	is greater than	
6.	is less than	
7.	is greater than	

8. Fill in the blank with a fraction to make the statement true. Draw a matching model.

$\frac{1}{6}$ is greater than	$\frac{1}{5}$ is less than
$\frac{1}{3}$ is less than	$\frac{1}{2}$ is greater than

- 9. Debbie ate $\frac{1}{8}$ of a large brownie. Julian ate $\frac{1}{2}$ of a small brownie. Julian says, "I ate more than you because $\frac{1}{2} > \frac{1}{8}$."
 - a. Use pictures and words to explain Julian's mistake.

b. How could you change the problem so that Julian is correct? Use pictures and words to explain.

Α			
	Multiply.		

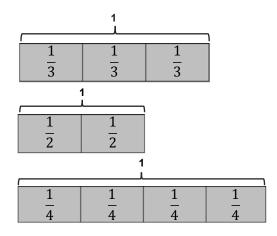
#	Correct	
#	Conect_	

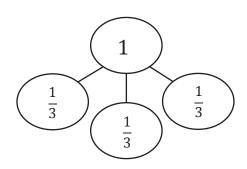
	Multiply.			
1	9 x 1 =	23	9 x 9 =	
2	1 x 9 =	24	3 x 9 =	
3	9 x 2 =	25	8 x 9 =	
4	2 x 9 =	26	4 x 9 =	
5	9 x 3 =	27	7 x 9 =	
6	3 x 9 =	28	5 x 9 =	
7	9 x 4 =	29	6 x 9 =	
8	4 x 9 =	30	9 x 5 =	
9	9 x 5 =	31	9 x 10 =	
10	5 x 9 =	32	9 x 1 =	
11	9 x 6 =	33	9 x 6 =	
12	6 x 9 =	34	9 x 4 =	
13	9 x 7 =	35	9 x 9 =	
14	7 x 9 =	36	9 x 2 =	
15	9 x 8 =	37	9 x 7 =	
16	8 x 9 =	38	9 x 3 =	
17	9 x 9 =	39	9 x 8 =	
18	9 x 10 =	40	11 x 9 =	
19	10 x 9 =	41	9 x 11 =	
20	1 x 9 =	42	12 x 9 =	
21	10 x 9 =	43	9 x 12 =	
22	2 x 9 =	44	13 x 9 =	

В	Multiply.	Improvemen	nt	# Correct
1	1 x 9 =	23	10 x 9 =	
2	9 x 1 =	24	9 x 9 =	
3	2 x 9 =	25	4 x 9 =	
4	9 x 2 =	26	8 x 9 =	
5	3 x 9 =	27	3 x 9 =	
6	9 x 3 =	28	7 x 9 =	
7	4 x 9 =	29	6 x 9 =	
8	9 x 4 =	30	9 x 10 =	
9	5 x 9 =	31	9 x 5 =	
10	9 x 5 =	32	9 x 6 =	
11	6 x 9 =	33	9 x 1 =	
12	9 x 6 =	34	9 x 9 =	
13	7 x 9 =	35	9 x 4 =	
14	9 x 7 =	36	9 x 3 =	
15	8 x 9 =	37	9 x 2 =	
16	9 x 8 =	38	9 x 7 =	
17	9 x 9 =	39	9 x 8 =	
18	10 x 9 =	40	11 x 9 =	
19	9 x 10 =	41	9 x 11 =	
20	9 x 3 =	42	12 x 9 =	
21	1 x 9 =	43	9 x 12 =	
22	2 x 9 =	44	13 x 9 =	

For each of the following:

- Draw a picture of the designated unit fraction copied to make at least two different wholes.
- Label the unit fractions.
- Label the whole as 1.
- Draw at least one number bond that matches a drawing.





1. Yellow strip

2. Brown strip

3. Orange square

4. Yarn

5. Water

6. Clay



Date _____

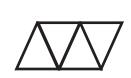
Each shape represents the unit fraction. Draw a picture representing a possible whole.

2.

3. Aileen and Jack used the same triangle representing the unit fraction $\frac{1}{4}$ to create 1 whole. Who did it correctly? Explain your answer.



Aileen's drawing



Jack's drawing

Name	

Date _____

Each shape represents the given unit fraction. Estimate to draw a possible whole.



2.



3. 1 third



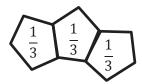
1 fourth

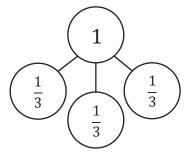


Each shape represents the given unit fraction. Estimate to draw a possible whole, label the unit fractions, and draw a number bond that matches the drawing. The first one is done for you.

5. $\frac{1}{3}$

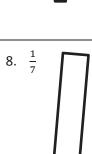






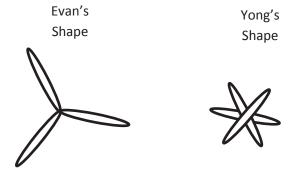


7. $\frac{1}{5}$



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9. Evan and Yong used this shape \longrightarrow , representing the unit fraction $\frac{1}{3}$, to draw 1 whole. Shania thinks both of them did it correctly. Do you agree with her? Explain your answer.



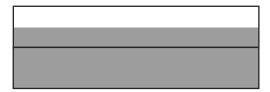
Name	Date	

The shape represents 1 whole. Write a unit fraction	The shaded part represents 1 whole. Divide 1 whole
to describe the shaded part.	to show the same unit fraction you wrote in Part (a).
1a.	b.
2a.	b.
3a.	b.
4a.	b.
5a.	b.

6. Use the diagram below to complete the following statements.

Rope A Rope B Rope C

- a. Rope _____ is $\frac{1}{2}$ the length of Rope B.
- b. Rope _____ is $\frac{1}{2}$ the length of Rope A.
- c. Rope C is $\frac{1}{4}$ the length of Rope _____.
- d. If Rope B measures 1 m long, then Rope A is _____ m long, and Rope C is ____ m
- e. If Rope A measures 1 m long, Rope B is _____ m long, and Rope C is ____ m long.
- 7. Ms. Fan drew the figure below on the board. She asked the class to name the shaded fraction. Charlie answered $\frac{3}{4}$. Janice answered $\frac{3}{2}$. Jenna thinks they're both right. With whom do you agree? Explain your thinking.



Name Date

Ms. Silverstein asked the class to draw a model showing $\frac{2}{3}$ shaded. Karol and Deb drew the models below. Whose model is correct? Explain how you know.





Karol's Diagram

Deb's Diagram

Name	Date

The shape represents 1 whole. Write a fraction to describe the shaded part.	The shaded part represents 1 whole. Divide 1 whole to show the same unit fraction you wrote in Part (a).
1a.	p.
2a.	b.
3a.	b.
4a.	b.

5. Use the pictures below to complete the following statements.



- a. Towel Rack _____ is about $\frac{1}{2}$ the length of Towel Rack C.
- b. Towel Rack _____ is about $\frac{1}{3}$ the length of Towel Rack C.
- c. If Towel Rack C measures 6 ft long, then Towel Rack B is about _____ ft long, and Towel Rack A is about _____ ft long.
- d. About how many copies of Towel Rack A equal the length of Towel Rack C? Draw number bonds to help you.
- e. About how many copies of Towel Rack B equal the length of Towel Rack C? Draw number bonds to help you.

- 6. Draw 3 strings—B, C, and D—by following the directions below. String A is already drawn for you.
 - String B is $\frac{1}{3}$ of String A.
 - String C is $\frac{1}{2}$ of String B.
 - String D is $\frac{1}{3}$ of String C.

Extension: String E is 5 times the length of String D.

String A CANALANA CONTROL OF THE PROPERTY OF T