Find Sums on an Addition Table

Essential Question How do you find sums on an addition table?

Model and Draw

$$3 + 4 = ?$$

The sum for 3 + 4 is found where row 3 and column 4 meet.

) 					С	olum	n
	+	0	I	2	3	4	
	0	0	Ι	2	3	4	
	-1	ı	2	3	4	5	
	2	2	3	4	5	6	
→	3	3	4	5	6		
	4	4	5	6	7	8	

Share and Show



I. Write the missing sums in the addition table.

+	0	I	2	3	4	5	6	7	8	9	10
0	0	I	2	3	4	5	6			9	
1	Ι	2	3	4	5	6			9		11
2	2	3	4	5	6			9		П	12
3	3	4	5	6			9			12	13
4	4	5	6			9			12	13	14
5	5	6			9		П	12	13	14	15
6	6			9		П	12	13	14	15	16
7			9		П	12	13	14	15	16	17
8		9		П	12	13	14	15	16	17	18
9	9		11	12	13	14	15	16	17	18	19
[10]		H	12	13	14	15	16	17	18	19	20

row



Math Talk Describe a pattern in the addition table.

2. Write the missing sums in the addition table.

+	0	I	2	3	4	5	6	7	8	9	10
0	0	Ι	2	3	4	5	6	7	8	9	10
I	Ι	2	3	4	5	6	7	8	9	10	
2	2	3	4	5	6	7	8	9	10		12
3	3	4	5	6	7	8	9	10		12	
4	4	5	6	7	8	9	10		12		
5	5	6	7	8	9	10		12			15
6	6	7	8	9	10		12			15	16
7	7	8	9	10		12			15	16	17
8	8	9	10		12			15	16	17	18
9	9	10		12			15	16	17	18	19
[10]	10		12			15	16	17	18	19	20

Problem Solving (World



Solve. Write or draw to explain.

3. Natasha has 13 apples. Some apples are red and some are green. She has more red apples than green apples. How many red apples and how many green apples could she have?



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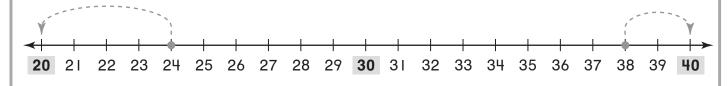
Estimate Sums: 2-Digit Addition

Essential Question How can you estimate the sum of two 2-digit numbers?

Model and Draw

Estimate the sum of 24 + 38.

Find the nearest ten for each number.



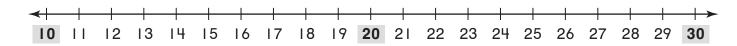
An estimate of the sum is _____.

Share and Show



Find the nearest ten for each number.

I. Estimate the sum of 18 + 29.



Add the tens to estimate.

_____ + ____ = ____

An estimate of the sum is _____.



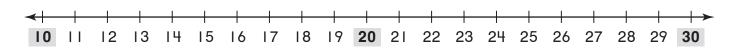
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Math Talk How did you know which ten is nearest to 18?

Find the nearest ten for each number.

Add the tens to estimate.

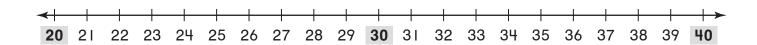
2. Estimate the sum of 13 + 28.



_____ + ____ = _____

An estimate of the sum is _____.

3. Estimate the sum of 31 + 22.



_____ + ____ = _____

An estimate of the sum is _____.

Problem Solving



Solve. Write or draw to explain.

4. Mark has 34 pennies. Emma has 47 pennies. About how many pennies do they have altogether?

about _____pennies



TAKE HOME ACTIVITY • Ask your child to use the number line for Exercise 2 and describe how to estimate the sum of 27 + 21.

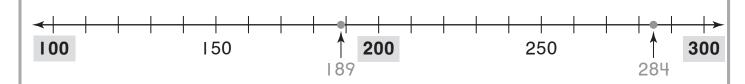
Estimate Sums: 3-Digit Addition

Essential Question How can you estimate the sum of two 3-digit numbers?

Model and Draw

Estimate the sum of 189 + 284.

Find the nearest hundred for each number.



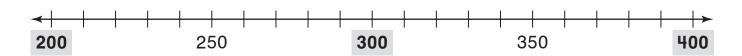
An estimate of the sum is <u>500</u>.

Share and Show



Find the nearest hundred for each number. Add the hundreds to estimate.

I. Estimate the sum of 229 + 386.



An estimate of the sum is _____.



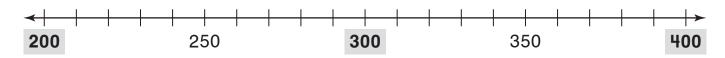
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Math Talk How do you know which two hundreds a 3-digit number is between?

Find the nearest hundred for each number.

Add the hundreds to estimate.

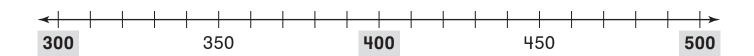
2. Estimate the sum of 324 + 218.



_____ + ____ = ____

An estimate of the sum is _____.

3. Estimate the sum of 468 + 439.



_____ +____ = _____

An estimate of the sum is _____.

Problem Solving



Solve. Write or draw to explain.

4. There are 375 yellow fish and 283 blue fish swimming around a coral reef. About how many fish are there altogether?

about _____ fish



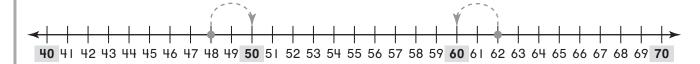
TAKE HOME ACTIVITY • Ask your child to use the number line for Exercise 2 and describe how to estimate the sum of 215 \pm 398.

Estimate Differences: 2-Digit Subtraction

Essential Question How can you estimate the difference of two 2-digit numbers?

Model and Draw

Estimate the difference of 62 - 48. Find the nearest ten for each number.



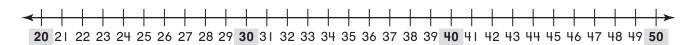
An estimate of the difference is ______.

Share and Show



Find the nearest ten for each number. Subtract the tens to estimate.

I. Estimate the difference of 42 - 29.



_____ = ____

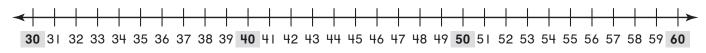
An estimate of the difference is _____.



Math Talk How do you know which two tens a number is between?

Find the nearest ten for each number. Subtract the tens to estimate.

2. Estimate the difference of 51 - 39.



_____ = ____

An estimate of the difference is ______.

3. Estimate the difference of 79 - 56.



____ = ___

An estimate of the difference is .

Problem Solving (Red



Solve. Write or draw to explain.

4. A farmer has 91 cows. 58 of the cows are in the barn. About how many of the cows are not in the barn?

about _____ cows



TAKE HOME ACTIVITY • Ask your child to use the number line for Exercise 2 and describe how to estimate the difference of 57-41.

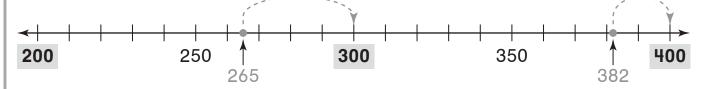
Estimate Differences: 3-Digit Subtraction

Essential Question How can you estimate the difference of two 3-digit numbers?

Model and Draw

Estimate the difference of 382 - 265.

Find the nearest hundred for each number.



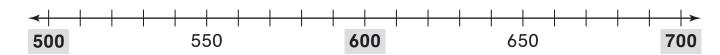
An estimate of the difference is ______

Share and Show



Find the nearest hundred for each number. Subtract the hundreds to estimate.

I. Estimate the difference of 674 - 590.



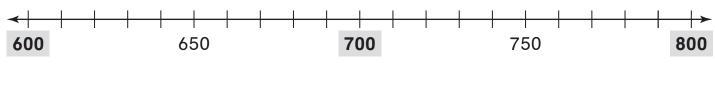
_____ - ____ = _____

An estimate of the difference is _____.

Math Talk How did you know which hundred is nearest to 674?

Find the nearest hundred for each number. Subtract the hundreds to estimate.

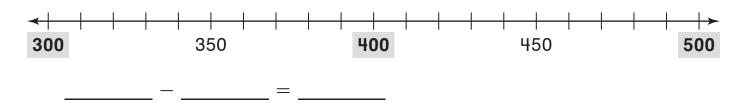
2. Estimate the difference of 791 - 612.



____ = ____

An estimate of the difference is ______.

3. Estimate the difference of 487 - 309.



An estimate of the difference is ______.

Problem Solving



Solve. Write or draw to explain.

4. A mail carrier had 819 letters to deliver. Then she delivered 687 letters. About how many letters does she still have to deliver?

about letters



TAKE HOME ACTIVITY • Ask your child to use the number line for Exercise 2 and describe how to estimate the difference of 786 - 611.

Order 3-Digit Numbers

Essential Question: How does place value help you order 3-digit numbers?

Model and Draw

You can order 249, 418, and 205 from least to greatest. First, compare the hundreds. Next, compare the tens and then the ones, if needed.

Hundreds	Tens	Ones
2	4	9
4	I	8
2	0	5

I compare the hundreds, 249 and 205 are both less than 418.

Which is less, 249 or 205? I compare the tens. 205 is less than 249, so 205 is the least.

Share and Show



Write the numbers in order from least to greatest.

I.

2.



Math Talk Do you always need to compare the ones digits when you order numbers? Explain.

Write the numbers in order from least to greatest.

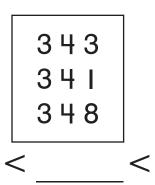
3.



<

4.

5.



6.

Problem Solving



7. Brenda, Jean, and Pam play a video game. Brenda scores the highest. Jean scores the lowest.

Brenda	863
Jean	767
Pam	?

On the line, write a 3-digit number that could be Pam's score.





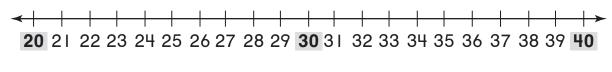
Concepts and Skills

I. Write the missing sums in the addition table.

+	0	1	2	3	4	5	6	7	8	9	10
0	0	I	2	3	4	5		7		9	
	_	2	3	4	5		7		9		11
2	2	3	4	5		7		9		П	12
3	3	4	5		7		9		П	12	13
4	4	5		7		9		П	12	13	14
5	5		7		9		П	12	13	14	15

Find the nearest ten.

2. Estimate the sum of 24 and 36.

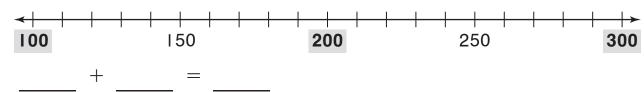


+ =

An estimate of the sum is _____.

Find the nearest hundred.

3. Estimate the sum of 285 and 122.



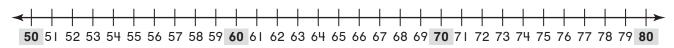
An estimate of the sum is _____.

Getting Ready for Grade 3

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Find the nearest ten.

4. Estimate the difference of 72 - 59.

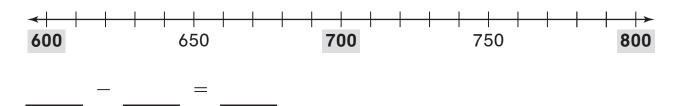


- =

An estimate of the difference is _____.

Find the nearest hundred.

5. Estimate the difference of 792 and 619.



An estimate of the difference is _____.

- 6. Which of the following numbers will make this true?

- **0403**
- O 398
- **0430**
- O 33 I

Equal Groups of 2

Essential Question: How can you find the total number in equal groups of 2?

Model and Draw

The pet store has 3 fishbowls in the window. There are 2 goldfish in each bowl. How many goldfish are there in all?

I can count the equal groups by twos–2, 4, 6–to find how many in all.

Make 3 groups of 2 counters.







Share and Show



Complete the sentence to show how many in all.

I.











_____ groups of _____ is ____ in all.

2.







_____ groups of _____ is ____ in all.

3.







_____ groups of _____ is ____ in all.



Math Talk How can you use counters to find 2 + 2 + 2 + 2 + 2?

Complete the sentence to show how many in all.

4.











_____ groups of _____ is ____ in all.

5.











_____ groups of _____ is ____ in all.

6.















_____ groups of _____ is ____ in all.

7.













_____ groups of _____ is ____ in all.

Problem Solving (Real World



Solve. Write or draw to explain.

8. Coach Baker keeps 2 basketballs in each bin. There are 5 bins. How many basketballs are stored in the bins?

basketballs



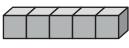
TAKE HOME ACTIVITY • Have your child draw groups of two Xs and tell you how to find how many there are in all.

Equal Groups of 5

Essential Question: How can you find the total number in equal groups of 5?

Model and Draw

Luke made 3 cube trains. He connected 5 cubes in each train. How many cubes did he use in all?





I can count the equal groups by fives-5, 10, 15-to find how many in all.

Make 3 groups of 5 cubes.

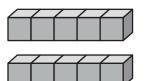
3 groups of 5 is 15 in all.

Share and Show

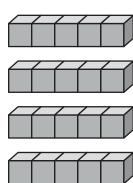


Complete the sentence to show how many in all.

I.



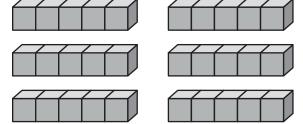
2.



groups of ____ is ___ in all. | groups of ___ is ___ in all.

3.

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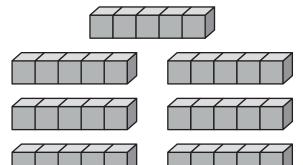
___ groups of ____ is ___ in all.



Math Talk How can you use addition to find how many in all in Exercise 2?

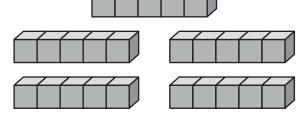
Complete the sentences to show how many in all.

4.



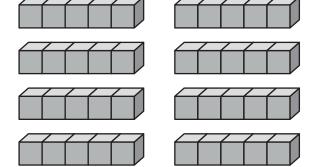
____ groups of ____ is ____ in all.

5.



____ groups of ____ is ___ in all.

6.



____ groups of ____ is ___ in all.

Problem Solving (Re



Solve. Write or draw to explain.

7. Gina fills 6 pages of her photo album. She puts 5 photos on each page. How many photos does Gina put in her album?

____ photos



TAKE HOME ACTIVITY • Place your hands next to your child's hands. Ask how many groups of 5 fingers. Have your child tell you how to find how many in all. How many fingers in all?

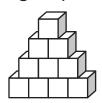
Equal Groups of 10

Essential Question: How can you find the total number in equal groups of 10?

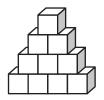
Model and Draw

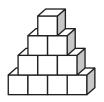
There are 4 packs of juice. Each pack has 10 juice boxes. How many juice boxes are there in all?

Make 4 groups of 10 cubes.









 $\underline{\hspace{1cm}}$ groups of $\underline{\hspace{1cm}}$ is $\underline{\hspace{1cm}}$ in all.

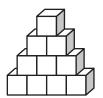
I can count the equal groups by tens–10, 20, 30, 40–to find how many in all.

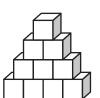
Share and Show



Complete the sentence to show how many in all.

I.





2.

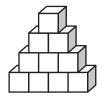


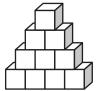


____ groups of ____ is ____ in all.

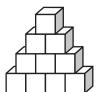
____ groups of ____ is ____ in all.

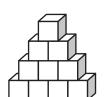
3.











____ groups of ____ is ____ in all.

Math Talk Explain.

How many groups of ten are in 70?

Complete the sentence to show how many in all.

4.















groups of ____ is ___ in all.

5.

















groups of ____ is ___ in all.

6.











___ groups of ____ is ___ in all.

Problem Solving



Solve. Write or draw to explain.

7. To count his pennies, Travis puts 10 pennies in a stack. He makes 4 stacks. How many pennies does Travis have?

pennies



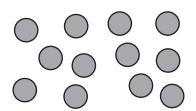
TAKE HOME ACTIVITY • Give your child 30 pieces of macaroni or other small objects. Have your child make groups of 10. Ask how many groups there are. Ask your child to tell you how to find how many in all. How many pieces in all?

Size of Shares

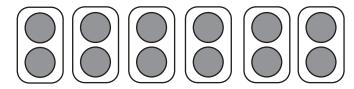
Essential Question How can you place items in equal groups?

Model and Draw

When you divide, you place items in equal groups. Joel has 12 carrots. There are 6 rabbits. Each rabbit gets the same number of carrots. How many carrots does each rabbit get?



Place 12 counters in 6 equal groups.



counters in each group

So, each rabbit gets ____ carrots.

Share and Show



Use counters. Draw to show your work. Write how many in each group.

I. Place 10 counters in 2 equal groups.

____ counters in each group

2. Place 6 counters in 3 equal groups.

____ counters in each group

Math Talk How did you know how many counters to place in each group for Exercise 2?

Use counters. Draw to show your work. Write how many in each group.

3. Place 9 counters in 3 equal groups.

____ counters in each group

4. Place 12 counters in 2 equal groups.

____ counters in each group

5. Place 16 counters in 4 equal groups.

____ counters in each group

Problem Solving



Solve. Draw to show your work.

6. Mrs. Peters divides 6 orange slices between 2 plates. She wants to have 4 orange slices on each plate. How many more orange slices does she need?

____ more orange slices



TAKE HOME ACTIVITY • Ask your child to place 15 pennies into 3 equal groups, and then tell how many pennies are in each group.

Number of Equal Shares

Essential Question How can you find the number of equal groups that items can be placed into?

Model and Draw

There are 12 cookies, 3 cookies fill a snack bag. How many snack bags can be filled?

Place 12 counters in groups of 3.









. snack bags can be filled.

Share and Show



Use counters. Draw to show your work. Write how many groups.

I. Place 8 counters in groups of 4.

groups

2. Place 10 counters in groups of 2.

groups



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Math Talk Describe how you could find the number of groups of 2 you could make with 12 counters.

Use counters. Draw to show your work. Write how many groups.

3. Place 4 counters in groups of 2.

____ groups

4. Place 12 counters in groups of 4.

____ groups

5. Place 15 counters in groups of 3.

____ groups

Problem Solving



Draw to show your work.

6. Some children want to play a board game. There are 16 game pieces. Each player needs to have 4 pieces. How many children can play?

__ children



TAKE HOME ACTIVITY • Use small items such as pennies or cereal. Have your child find out how many groups of 5 are in 20.

Solve Problems with Equal Shares

Essential Question: How can you solve word problems that involve equal shares?

Model and Draw

You can draw a picture to help you solve problems with equal shares.

There are 10 marbles in each bag. How many marbles are in 3 bags?







3 groups of 10 is 30 in all.

There are 30 marbles.

Share and Show



Solve. Draw or write to show what you did.

I. There are 5 oranges in each sack. How many oranges are in 4 sacks?

____ oranges

2. Sandy can plant 2 seeds in a pot. How many pots will Sandy need in order to plant 6 seeds?

___ pots



Math Talk Explain how you solved Exercise 2.

Solve. Draw to show what you did.

3. Ben gives each friend 2 crackers. How many crackers does he need for 6 friends?

____ crackers

4. Mrs. Green can pack 5 books in a box. How many boxes will she need in order to pack 15 books?

____ boxes

Problem Solving



5. Franco used 12 connecting cubes to build towers. All the towers are the same height. Draw a picture to show the towers he could have built.



TAKE HOME ACTIVITY • Ask your child to make up a word problem about 3 boxes of toys with 3 toys in each box. Have your child tell you how to solve the problem.

Concepts and Skills

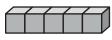
Complete the sentence to show how many in all.

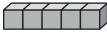
____ groups of ____ is ____ in all.

2.



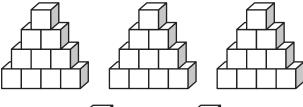


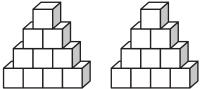




___ groups of ____ is ____ in all.

3.





groups of ____ is ___ in all.

Getting Ready for Grade 3

	Jse counters. Draw to show your work. Write how many in each group.					
4.	Place 14 counters in 2 equal groups.					
	0	counters in each group				
	se counters. Draw to show your work. rite how many groups.					
5.	Place 12 counters in groups of 2.					
		groups				
Sc	olve the problem.					
6.	Mrs. Owen puts 3 flowers in each vase. How many flowers are in 4 vases?	9.				
	O 7					
	0 9					

0 12

0 16

Hour Before and Hour After

Essential Question: How do you tell the time I hour before and I hour after a given time?

Model and Draw

For these times, the minute hand points to the same place. The hour hands point to different numbers.

The time is **8:00**.



The hour hand points to 8.

I hour before

7:00

The hour hand points to 7.



I hour after

9:00

The hour hand points to 9.



Share and Show



Write the time shown on the clock. Then write the time I hour before and I hour after.

I.



I hour before

I hour after

2.



I hour before

I hour after



Math Talk How are the hands on a clock that shows 8 o'clock the same as the hands on a clock I hour after? How are they different?

Write the time shown. Then write the time I hour before and I hour after.

3.



I hour before

I hour after

4.



I hour before

I hour after

5.



I hour before

I hour after

6.



I hour before

I hour after

Problem Solving



7. Tim feeds the cat I hour after 7:00.

Draw the hour hand and the minute hand to show I hour after 7:00. Then write the time.



Tim needs to feed the cat at _____



TAKE HOME ACTIVITY • Ask your child what the time will be I hour after 3:30. What time was it I hour before 3:30? Have your child tell you how he or she knows.

Elapsed Time in Hours

Essential Question How do you find the number of hours between two times?

Model and Draw

Baseball practice starts at 2:00. Everyone leaves practice at 4:00. How long does baseball practice last?
Use the time line to count how many hours passed from 2:00 P.M. to 4:00 P.M.





hours

Starts at 2:00 Ends at 4:00

9:00 A.M. ↑ 11:00 A.M. ↑ 1:00 P.M. ↑ 3:00 P.M. ↑ 5:00 P.M. ↑

10:00 A.M. Noon 2:00 P.M. 4:00 P.M. 6:00 P.M.

Share and Show



Use the time line above. Solve.

I. The game starts at 3:00 P.M. It ends at 6:00 P.M. How long does the game last?

____ hours

2. The plane leaves at 10:00 A.M. It arrives at 2:00 P.M. How long is the plane trip?

___ hours

3. Max goes out at 2:00 p.m. He comes back in at 5:00 p.m. For how long was Max out?

____ hours

4. Art class starts at 9:00 A.M. It ends at 11:00 A.M. How long is the art class?

___ hours



Math Talk Exercise 2.

Describe how you used the time line for

Use the time line below. Solve.



5. Paul's baby sister goes to sleep at 4:00 p.m. She wakes up at 6:00 p.m. How long does the baby sleep?

hours

6. Julia goes to a friend's house at noon. She comes home at 3:00 p.m. How long is Julia gone?

hours

- 7. Jeff starts raking leaves at 11:00 A.M. He stops at 1:00 P.M. How long does Jeff rake leaves?
- 8. Mom and Carrie arrive at the shopping mall at 1:00 p.m. They leave at 5:00 p.m. How long are they at the mall?

____ hours

hours

Problem Solving



Solve. Draw or write to explain.

9. Mr. Norton writes the time for classes on the board.

Class	Time
Math	8:30 A.M.
Reading	9:30 A.M.
Music	II:30 A.M.

How long will reading class last?

hours



TAKE HOME ACTIVITY • Ask your child how much time passes between 4:30 and 7:30. Have your child explain how he or she arrived at the answer.

Model and Draw

You can use subtraction if the times are within the same hour.

Ken starts cleaning his room at 3:15 P.M. He finishes at 3:35 P.M. How long does it take Ken to clean his room?



Starts at 3:15 p.m. Ends at 3:35 p.m.

So it takes Ken **20** minutes.

Share and Show



Subtract to solve. Show your work.

I. Leah starts eating lunch at 12:10 P.M. She finishes at 12:25 P.M. How long does it take for Leah to eat lunch?

2. Kwan gets on the school bus at 8:10 A.M. He gets to school at 8:55 A.M. How long is Kwan's bus ride?

____ minutes

__ minutes

3. Carla takes her dog to the park at 2:05 p.m. She gets back at 2:40 p.m. How long does Carla walk her dog?

4. Ethan starts his spelling homework at 6:25 р.м. He finishes at 6:45 р.м. How long does Ethan work on his spelling?

____ minutes

____ minutes

Math Talk

How could you check your answers by looking at a clock?

Subtract to solve. Show your work.

5. Mrs. Hall puts a pizza in the oven at 6:10 p.m. She takes it out at 6:30 p.m. How long does the pizza bake?

6. The reading test starts at 1:10 p.m. Everyone must stop at 1:25 p.m. How long do the children have to take their test?

minutes

minutes

- 7. Kelly starts drawing at 8:15 p.m. She finishes her picture at 8:40 p.m. How long does Kelly draw?
- 8. Tony starts reading at 4:30 P.M. He stops reading at 4:45 P.M. How long does Tony read?

____ minutes

____ minutes

Problem Solving



Show how to use subtraction to solve.

9. Mr. West gets to the bus stop at 9:05 A.M. He looks at the bus schedule.

Bus Arrival Times
8:30 а.м.
9:30 A.M.
10:30 а.м.

How long will Mr. West need to wait for a bus?

_ minutes



TAKE HOME ACTIVITY \bullet Have your child track how many minutes it would take to do math homework if he or she starts at 5:15 p.m. and stops at 5:45 p.m.

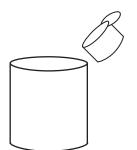
Capacity • Nonstandard Units

Essential Question How can you measure how much a container holds?

Model and Draw

Use a scoop and rice to estimate and measure how much a can holds.

- Estimate how many scoops the can holds.
- Fill a scoop with rice or water.
- Pour it into the can.
- Repeat until the can is full. Keep track of the number of scoops.



Share and Show



How many scoops does the container hold? Estimate. Then measure.

Container	Estimate	Measure		
I. mug	about scoops	about scoops		
vase	about scoops	about scoops		
paper cup	about scoops	about scoops		



Math Talk Explain how you can tell which of the containers on this page is the largest.

How many scoops does the container hold? Estimate. Then measure.

Container	Estimate	Measure		
4. jar	about scoops	about scoops		
milk carton	about scoops	about scoops		
6. bowl	about scoops	about scoops		

Problem Solving



Solve.

7. The red bowl holds 5 scoops of rice. The blue bowl holds twice as much rice as the red bowl. How many scoops of rice do the two bowls hold in all?

____ scoops in all



TAKE HOME ACTIVITY • Have your child use a paper cup to estimate how much various containers hold. Then check his or her estimate by measuring how much each container holds.

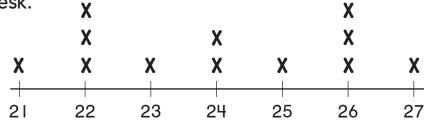
Describe Measurement Data

Essential Question What measurement data can a line plot show?

Model and Draw

A line plot shows data on a number line.

Each X on this line plot stands for the length of I desk.



Lengths of Our Desks in Inches

12 desks were measured.
Two desks are 21 inches long.

The longest desk is 27 inches long.

The shortest desk is 2! inches long.

Share and Show



Write 3 more sentences to describe what the line plot above shows.

|. ______

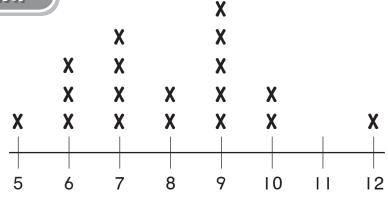
2. _____

3. _____



Houghton Mifflin Harcourt Publishing Company

Math Talk Suppose you measured another desk. If the desk was 23 inches long, how could you show this on the line plot above?



Lengths of Our Classroom Books in Inches

Use the line plot to answer the questions.

4. How many books are 9 and 10 inches in length?

5. What is the difference in length between the shortest and longest book?

books

____ inches

Write another question you can answer by looking at the line plot. Answer your question.

6. Question _____

Д	nswer	

Problem Solving (Real World

7. Look at the table to the right. It shows Tom's books and their lengths. Add the data for the books to the line plot at the top of the page.

Book	Length
Reading	II inches
Math	12 inches
Spelling	9 inches



TAKE HOME ACTIVITY • Ask your child to explain how to read the line plot on this page.

Concepts and Skills

Write the time shown on the clock. Then write the time I hour before and I hour after.

I.



I hour before

I hour after

2.



I hour before

I hour after

4:00 p.m. 5:00 p.m. 6:00 p.m. 2:00 P.M. 3:00 P.M. 7:00 р.м.

Use the time line above. Solve.

3. A movie begins at 2:00 P.M. It is over at 5:00 P.M. How long is the movie?

hours

4. Madison arrives at a friend's house at 3:00 P.M. She leaves at 7:00 P.M. How long does she stay?

hours

Getting Ready for Grade 3

8:00 P.M.

5. Will arrives at the library at 1:15 P.M. He leaves at 1:50 P.M. How long is Will at the library?

____ minutes

6. Andrew begins reading at 3:20 P.M. He stops reading at 3:45 P.M. How long did Andrew read?

____ minutes

How many scoops does the container hold? Estimate. Then measure.

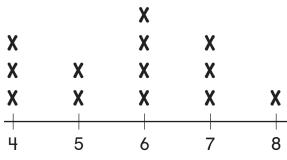
7.



Estimate: about ____ scoops

Measure: about ____ scoops

8. What is the difference in height between the shortest and tallest plants?



O 3 inches

4 inches

O 5 inches

O 6 inches

Fraction Models: Thirds and Sixths

Essential Question How can you identify thirds and sixths?

Model and Draw









part	of	3	equal	parts	or
 _ '			·	'	

Share and Show



Color the strips. Show two different ways to show I third.

_		
•		

Color the strips. Show two different ways to show I sixth.

_			 	
2				
-5.				
••				
	1		I	1



Math Talk How are 3 thirds and 6 sixths alike?

On Your Own

Color the strips. Show two different ways to show 2 thirds.

_		
E		
J .		

6.

Color the strips. Show two different ways to show 2 sixths.

7			
/.			

0			
ο.			
	l		l

Color the strips. Show two different ways to show 3 sixths.

_			
0			
٧.			

10.			
10.			

Problem Solving (



Solve. Write or draw to explain.

II. A sub sandwich is cut into sixths. Tim eats two parts of the sandwich. How many parts are left?

_____ parts left



TAKE HOME ACTIVITY • Have your child draw a picture that shows a slice of cheese divided into thirds.

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Fraction Models: Fourths and Eighths

Essential Question How can you identify fourths and eighths?

Model and Draw

 $\frac{4}{2}$ equal parts or $\frac{4}{2}$ fourths $\frac{8}{2}$ equal parts or $\frac{8}{2}$ eighths

part of 4 equal parts or fourth

_ part of 8 equal parts or eighth

Share and Show



Color the strips. Show two different ways to show I fourth.

I.

2.



Color the strips. Show two different ways to show I eighth.

3.

4.



Math Talk How are 4 fourths and 8 eighths alike?

On Your Own

Color the strips. Show two different ways to show 2 fourths.

5.

6.

Color the strips. Show two different ways to show 3 eighths.

7.

8.

Color the strips. Show two different ways to show 5 eighths.

10.

Problem Solving



Solve. Write or draw to explain.

II. A loaf of bread is cut into eighths. Jake uses 2 parts to make his lunch. Fran uses 3 parts to make her lunch. How many parts of the loaf are left?

_____ parts left



TAKE HOME ACTIVITY • Have your child draw a picture to show a slice of cheese divided into fourths.

O Houghton Mifflin Harcourt Publishing Company

Compare Fraction Models

Essential Question How can you use fraction models to make comparisons?



fourth fourth fourth fourth

> half half

I fourth I half

Share and Show



Color to show the fractions. Write <, =, or >.

I.

| half

half

half

2 fourths fourth | fourth |

fourth

I half

I fourth

2 fourths

2.

I fourth fourth fourth

fourth

l eighth eightheightheightheightheightheightheighth

I eighth



Look at the strips above. Is I half greater than or less than 3 fourths? How do you know?

On Your Own

Color to show the fractions. Write <, =, or >.

3.

l third

third

third

third

I sixth sixth sixth sixth sixth sixth

I third

I sixth

4.

3 sixths sixth sixth sixth sixth sixth sixth

I half

half

half

3 sixths

I half

Problem Solving



Solve. Draw to show your answer.

5. Barry cut a cheese stick into halves and ate a half. Marcy cut a cheese stick into fourths and ate a fourth. Which child ate more cheese?

ate more.

TAKE HOME ACTIVITY • Ask your child to draw a picture that shows a square divided into fourths.

Concepts and Skills

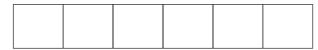
Color the strips. Show two different ways to show I third.

- I. ______
- 2.

l	

Color the strips. Show two different ways to show 2 sixths.

- 3.
- 4.



Color the strips. Show two different ways to show 2 fourths.

- 5.
- 6.



Color the strips. Show two different ways to show 4 eighths.

- 7.
- 8.



Color to show the fractions. Write >, <, or =.

9. I half

half	half

3 fourths

|--|

I half 3 fourths

10. I third

third	third	third
-------	-------	-------

2 sixths

sixth	sixth	sixth	sixth	sixth	sixth

I third 2 sixths

- II. A pizza has 6 slices. Six friends share the pizza equally. What fraction of the pizza does each friend eat?
 - O I third
 - O 2 thirds
 - O I sixth
 - O 2 sixths



Find Sums on an Addition Table

I. Write the missing sums in the addition table.

+	0	ı	2	3	4	5	6	7	8	9	10
0	0	ı	2	3	4	5	6	7	8		10
1	I	2	3	4	5	6	7	8		10	11
2	2	3	4	5	6	7	8		10	11	
3	3	4	5	6	7	8		10	11		13
4	4	5	6	7	8		10	П		13	14
5	5	6	7	8		10	11		13	14	
6	6	7	8		10	11		13	14		16
7	7	8		10	П		13	14		16	17
8	8		10	11		13	14		16	17	18
9		10	11		13	14		16	17	18	19
10	10			13	14		16	17	18	19	20

Problem Solving (Real World



Solve. Write or draw to explain.

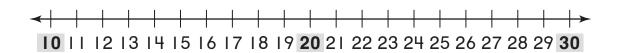
2. Marvin finds doubles facts, such as 4 + 4 and 1 + 1, on the addition table. He colors each sum.

What pattern does Marvin make when he colors the sums of the doubles facts?

Estimate Sums: 2-Digit Addition

Find the nearest ten for each number. Add the tens to estimate.

I. Estimate the sum of 21 + 17.



+ ____ = ____

An estimate of the sum is _____.

2. Estimate the sum of 32 + 49.



An estimate of the sum is .

Problem Solving (Real World



Solve. Write or draw to explain.

3. Taryn had 38 marbles. Her sister gave her 29 more marbles. Estimate the number of marbles Taryn has now.

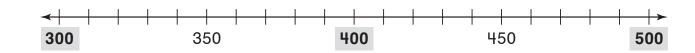
about marbles

Lesson 3

Estimate Sums: 3-Digit Addition

Find the nearest hundred for each number. Add the hundreds to estimate.

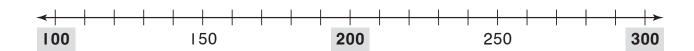
I. Estimate the sum of 332 + 459.



_____ + ____ = _____

An estimate of the sum is _____.

2. Estimate the sum of 295 + 198.



+ =

An estimate of the sum is .

Problem Solving (Real world



Solve. Write or draw to explain.

3. Anja collected shells at the beach. She has 377 shells in a box and 219 shells in a pail. Estimate the number of shells Anja has in all.

about _____ shells

Find the nearest ten for each number. Subtract the tens to estimate.

I. Estimate the difference of 48 - 2I.



____ = ____

An estimate of the difference is _____.

2. Estimate the difference of 51 - 38.



____ - ___ = ____

An estimate of the difference is .

Problem Solving (Real World



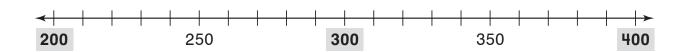
Solve. Write or draw to explain.

3. Hannah's class collected 37 bottles and 16 cans to recycle. About how many more bottles than cans did the class collect?

about _____ more bottles

Find the nearest hundred for each number. Subtract the hundreds to estimate.

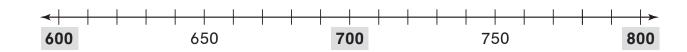
I. Estimate the difference of 386 - 235.



____ = ____

An estimate of the difference is _____.

2. Estimate the difference of 790 - 674.



— =

An estimate of the difference is _____.

Problem Solving Real World



Solve. Write or draw to explain.

3. Max wants to have 425 baseball cards. He has 318 baseball cards right now. About how many more cards does he need to get?

about _____ more cards

Order 3-Digit Numbers

Write the numbers in order from least to greatest.

I.

	0	_
6	0	9

2.

_____<

_	
•	

_

<	<	

3.

4.

 <		

____<

<	<	

Problem Solving Real World



5. Greg, Sam, and Trevor play a video game. Sam scores the highest. Greg scores the lowest.

Greg	494
Sam	691
Trevor	?

On the line, write a 3-digit number that could be Trevor's score.

Equal Groups of 2

Complete the sentence to show how many in all.

_____ groups of _____ is ____ in all.

_____ groups of _____ is ____ in all.

3.

____ groups of ____ is ____ in all.

_____ groups of _____ is ____ in all.

Problem Solving Real world



Solve. Write or draw to explain.

5. Paula puts 2 stuffed animals on each shelf. She has 5 shelves. How many stuffed animals does she put on her shelves?

_____ stuffed animals

Equal Groups of 5

Complete the sentence to show how many in all.



_____ groups of _____ is ____ in all.

____ groups of ____ is ___ in all.



_____ groups of _____ is ____ in all.

_____ groups of _____ is ____ in all.

Problem Solving (Real World



Solve. Write or draw to explain.

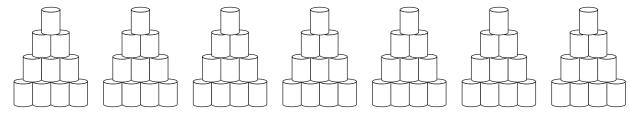
5. Mr. Peters buys markers in boxes of 5. He buys 5 boxes. How many markers does Mr. Peters buy?

____ markers

Equal Groups of 10

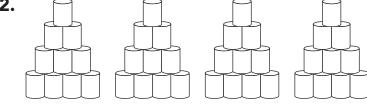
Complete the sentence to show how many in all.

I.



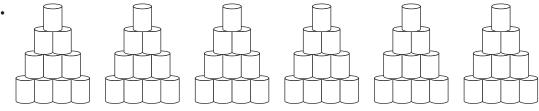
groups of _____ is ____ in all.

2.



groups of _____ is ____ in all.

3.



groups of _____ is ____ in all.

Problem Solving (Real



Solve. Write or draw to explain.

4. Mrs. Andrews buys cheese sticks in packages of 10. She buys 3 packages. How many cheese sticks does Mrs. Andrews buy?

cheese sticks

Size of Shares

Use counters. Draw to show your work. Write how many in each group.

I. Place 8 counters in 2 equal groups.

_____ counters in each group

2. Place 12 counters in 4 equal groups.

_____ counters in each group

3. Place 15 counters in 3 equal groups.

_____ counters in each group

Problem Solving (



Solve. Draw to show your work.

4. Lisa divides 12 flowers between 2 vases. She wants to have 8 flowers in each vase. How many more flowers does she need?

____ more flowers

Number of Equal Shares

Use counters. Draw to show your work. Write how many groups.

I. Place 6 counters in groups of 2.

____ groups

2. Place 16 counters in groups of 4.

____ groups

3. Place I2 counters in groups of 3.

groups

Problem Solving



Solve. Draw to show your work.

4. Maria has 18 flowers. Each vase holds 3 flowers. How many vases can she fill?

___ vases

Solve Problems with Equal Shares

Solve. Draw or write to show what you did.

I. There are 3 pizzas. Each pizza has 10 slices. How many slices of pizza are there in all?

slices

2. Mrs. Jensen can pack 2 sandwiches in a plastic bag. How many plastic bags will Mrs. Jensen need if she makes 8 sandwiches?

____ plastic bags

Problem Solving (Real World

Solve. Draw to show your work.

3. Each player has 5 game cards. How many game cards do 3 players have?

_____ game cards

Hour Before and Hour After

Write the time shown on the clock.

Then write the time I hour before and I hour after.

I. I hour before

I hour after

Problem Solving (R

5. Wes needs to walk the dog I hour after the time on the clock. When does Wes need to walk the dog?



Wes needs to walk the dog at



Use the time line above. Solve.

- I. Eli's grandma comes to visit at 8:00 A.M. She leaves at noon. How long does Eli's grandma visit?
- 2. The bus trip starts at 3:00 P.M and ends at 6:00 P.M. How long is the bus trip?

____ hours

___ hours

3. Mr. North starts mowing the grass at 8:00 A.M. He finishes at 10:00 A.M. How long does Mr. North mow grass?

hours

4. The movie starts at 2:00 P.M. It ends at 4:00 P.M. How long is the movie?

hours

Problem Solving



Solve. Draw or write to explain.

5. The times for the events at the science fair are listed.

Event	Time
Set Up Exhibits	1:00 р.м.
Judging	2:30 р.м.
Presentations	4:30 р.м.

How long will the judging last?

__ hours

Elapsed Time in Minutes

Subtract to solve.

- I. Anton walks his dog. He starts at 1:15 P.M. He finishes at 1:50 P.M. How long does he walk his dog?
- 2. It starts to rain at 10:05 A.M. It stops raining at 10:30 A.M. How long does it rain?

minutes

minutes

3. Hans starts washing dishes at 6:40 P.M. He finishes at 6:55 P.M. How long does it take Hans to wash the dishes?

4. Mrs. Finley puts cookies in the oven at 2:25 P.M. She takes them out at 2:35 P.M. How long are the cookies in the oven?

minutes

Problem Solving (Re



Show how to use subtraction to solve.

5. Mrs. Sanders gets to the train station at 4:10 P.M. She looks at the train arrival times.

T	rain Arrival Times
	1:30 р.м.
	2:45 р.м.
	4:30 р.м.

How long will she need to wait for a train? minutes

Hands On: Capacity • Nonstandard Units

How many scoops does the container hold? Estimate. Then measure.

	Container	Estimate	Measure		
l.					
	milk carton	about scoops	about scoops		
2.					
	measuring cup	about scoops	about scoops		
3.					
	sandwich bag	about scoops	about scoops		

Problem Solving (Real



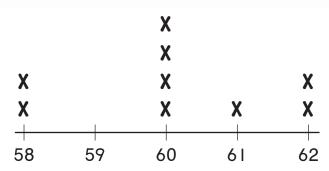
Solve.

4. The small box holds 4 scoops of flour. The large box hold 5 more scoops than the small box.

How many scoops of flour do the two boxes hold in all?

____ scoops in all

Describe Measurement Data



Lengths of the Cafeteria Tables in Inches Use the line plot to answer the questions.

I. How many tables are 62 inches long?

2. What is the difference in inches between the lengths of the shortest and longest tables?

tables

inches

Write two other questions you can answer by looking at the line plot. Answer your questions.

3. Question

4. Question

Answer

Answer

Problem Solving (Real world



Solve using data from the line plot above.

5. For the science fair, Mr. Johnson needs a table that is more than 60 inches long. How many of the cafeteria tables are longer than 60 inches?

tables

Color the strips. Show two different ways to show 5 sixths.

- 2.

Color the strips. Show two different ways to show 2 thirds.

- 3.

Color the strips. Show two different ways to show 3 sixths.

- **5**.
- 6.

Problem Solving (Real World



Solve. Write or draw to explain.

7. A sub sandwich is cut into thirds. Jon eats one part of the sandwich. How many parts are left?

parts

Color the strips. Show two different ways to show 5 eighths.

- 2.

Color the strips. Show two different ways to show 2 fourths.

- 3.

Color the strips. Show two different ways to show 2 eighths.

- 5.
- 6.

Problem Solving (Real World



Solve. Write or draw to explain.

7. A piece of string is cut into fourths. Jenny uses one of the parts to make a bracelet. How many parts of the string are left?

parts

third

Compare Fraction Models

Color to show the fractions. Write <, =, or >.

I.

I eighth

half				half			
eighth							

2.

٤.	2 sixths	sixth	sixth	sixth	sixth	sixth	sixth	_

I third

third

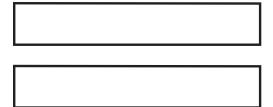
Problem Solving (Real World



third

Solve. Draw to show your answer.

3. Kay cut a cheese stick into sixths and ate a sixth. Jake cut a cheese stick into thirds and ate a third. Which child ate less cheese?



____ ate less cheese.