

May, 2023

Dear Parents/Guardians,

The attached math enrichment packet is meant to provide your child with a review of the skills she learned in 2nd grade. Your child is expected to to turn the completed packet in to <u>Mrs.Weeks</u> (3rd grade) on the first day of the 2023-2024 school year. Please encourage your daughter to schedule time throughout the summer to work on the packet; do not wait until the end of summer to begin.

Reminders for your child:

- · Read and follow all directions.
- Show work for ANY/ALL problems in an organized manner and number each problem to receive full credit.

Have a great summer!

Sincerely,

Mrs. Barker

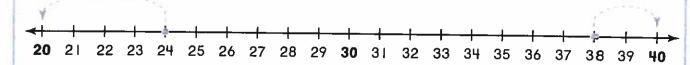
Estimate Sums: 2-Digit Addition

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



Estimate the sum of 24 + 38.

Find the nearest ten for each number.



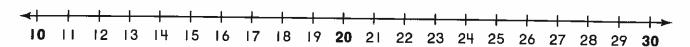
An estimate of the sum is ______.

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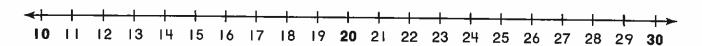
Math Talk How did you know which ten is nearest to 18?

Getting Ready for Grade 3

On Your Own

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

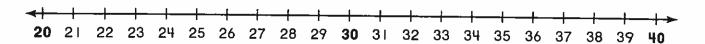
2. Estimate the sum of 13 + 28.



_____ + ____ = _____

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.

GR4 four

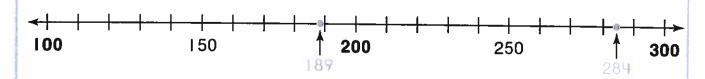
Estimate Sums: 3-Digit Addition

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.



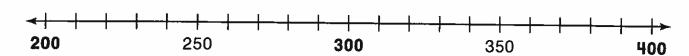
An estimate of the sum is _______

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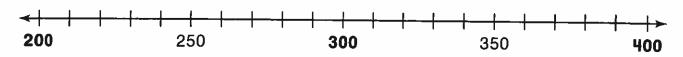
Math Talk How do you know which two hundreds a 3-digit number is between?

On Your Own

Find the nearest hundred for each number.

Add the hundreds to estimate.

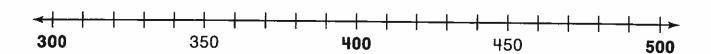
2. Estimate the sum of 324 + 218.



_____ + ____ = ____

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

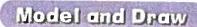


TAKE HOME ACTIVITY • Ask your child to use the number line for Exercise 2 and describe how to estimate the sum of 215 + 398.

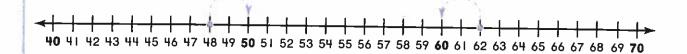
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Estimate Differences: 2-Digit Subtraction

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



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



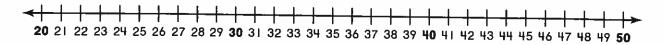
An estimate of the difference is _______.

Share and Show



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

1. Estimate the difference of 42 - 29.



An estimate of the difference is



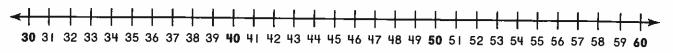
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Math Talk How do you know which two tens a number is between?

On Your Own

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

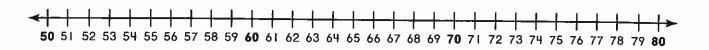
2. Estimate the difference of 51 - 39.



_____ - ____ = ____

An estimate of the difference is _____.

3. Estimate the difference of 79 - 56.



=

An estimate of the difference is ...

Problem Solving



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 57-4!.

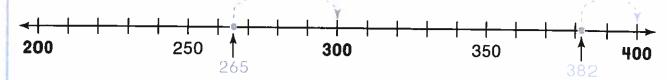
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Estimate Differences: 3-Digit Subtraction

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.



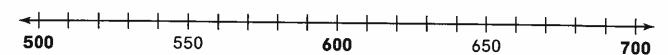
An estimate of the difference is______

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 ______.



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

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		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.

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2.



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



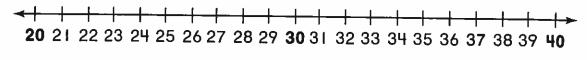
Concepts and Skills

1. Write the missing sums in the addition table.

\oplus	0	1	2	3	4	5	6	7	8	9	10
0	0		2	3	4	5		7		9	
1 2	ı	2	3	4	5		7		9		11
2	2	3	4	5		7		9		П	12
3	3	4	5		7		9		11	12	13
4	4	5		7		9		11	12	13	14
5	5		7		9		11	12	13	14	15

Find the nearest ten.

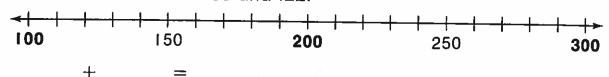
2. Estimate the sum of 24 and 36.



An estimate of the sum is ...

Find the nearest hundred.

3. Estimate the sum of 285 and 122.



An estimate of the sum is _____.

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Find the nearest ten.

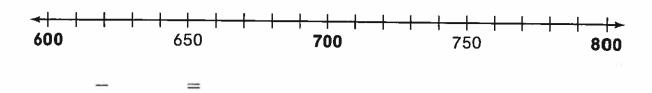
4. Estimate the difference of 72 - 59.



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
- 0398
- O 430
- 0331

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.

3 groups of 2 is 6 in all.

Share and Show



Complete the sentence to show how many in all.

ı.

_____ groups of _____ is ____ in all.

2.

)))

_____ groups of _____ is ____ in all.

3.

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____ groups of ____ is ___ in all.



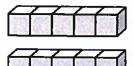
Math Talk How can you use counters to find 2+2+2+2+2?

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.

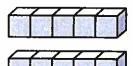
3 groups of 5 is 15 in all.

Share and Show

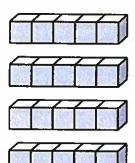


Complete the sentence to show how many in all.

I.



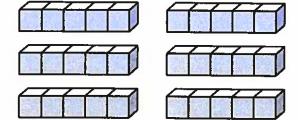
2.



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?

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.









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

Share and Show



groups of $\underline{\square}$ is $\underline{\square}$ in all.

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 Explain.

How many groups of ten are in 70?

Getting Ready for Grade 3

nineteen GRI9

On Your Own

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

3. Place 9 counters in 3 equal groups.

counter	s 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.

GR22 twenty-two

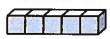
Concepts and Skills

Complete the sentence to show how many in all.

ı.))))))))))))))

____ groups of ____ is ____ in all.

2.



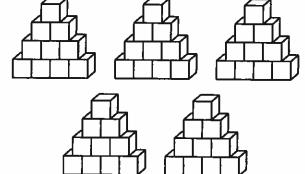






____ groups of ____ is ___ in all.

3.



____ groups of ____ is ___ in all.

	rite how many in each group.
4.	Place 14 counters in 2 equal groups.
	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	lve the problem.
6.	Mrs. Owen puts 3 flowers in each vase. How many flowers are in 4 vases?
	O 7
	0 9
	0 12
	O 16

Hour Before and Hour After

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

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.

1.

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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?

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.

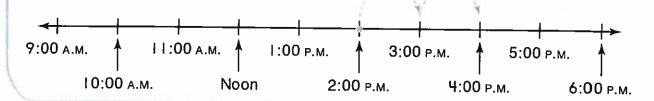




___ hours

Starts at 2:00

Ends at 4:00



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



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Math Talk Exercise 2.

Describe how you used the time line for

Elapsed Time in Minutes

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

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?

11 12 17 210 25 19 35 18 43 18 7 6 5



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 p.m. He finishes at 6:45 p.m. How long does Ethan work on his spelling?

___ minutes

___ minutes

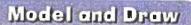
Math Talk

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

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Fraction Models: Thirds and Sixths

Essential Question How can you identify thirds and sixths?





 $\frac{3}{2}$ equal parts or $\frac{3}{2}$ thirds

 	1	 -	 	

part of 3 equal parts or third

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6 equal parts or 6 sixths

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part of 6 equal parts or

sixth

Share and Show



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

		 <u> </u>
1 1		
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	1

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

I

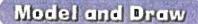


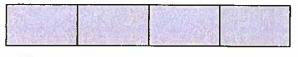
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Math Talk How are 3 thirds and 6 sixths alike?

Fraction Models: Fourths and Eighths

Essential Question How can you identify fourths and eighths?





 $\frac{4}{2}$ equal parts or $\frac{4}{2}$ fo

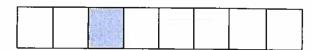
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part of 4 equal parts or

fourth



8 equal parts or 8 eighths



part of 8 equal parts or

eighth

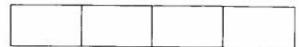
Share and Show



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

l .		

2.



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

3.				





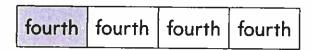
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Math Talk How are 4 fourths and 8 eighths alike?

Compare Fraction Models

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

Model and Draw





I fourth 🕙 I half

Share and Show



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

I. I half half

2 fourths fourth fourth fourth lalf 2 fourths

2. I fourth fourth fourth fourth

l eighth eightheightheightheightheightheightheighth



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