

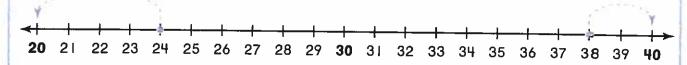
## **Estimate Sums: 2-Digit Addition**

**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.



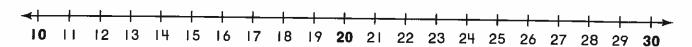
An estimate of the sum is \_\_\_\_\_\_.

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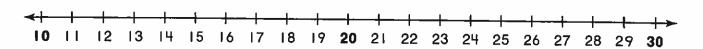
Math Talk How did you know which ten is nearest to 18?

Getting Ready for Grade 3

#### On Your Own

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

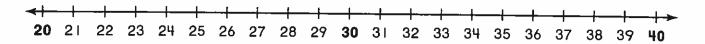
2. Estimate the sum of 13 + 28.



\_\_\_\_\_ + \_\_\_\_ = \_\_\_\_

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

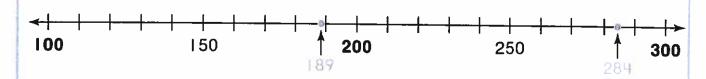
## **Estimate Sums: 3-Digit Addition**

**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.



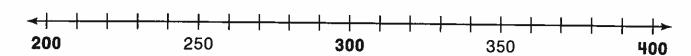
An estimate of the sum is \_\_\_\_\_\_

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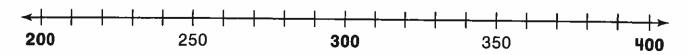
**Math Talk** How do you know which two hundreds a 3-digit number is between?

#### On Your Own

Find the nearest hundred for each number.

Add the hundreds to estimate.

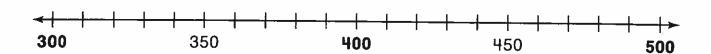
2. Estimate the sum of 324 + 218.



\_\_\_\_\_ + \_\_\_\_ = \_\_\_\_

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

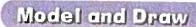


TAKE HOME ACTIVITY • Ask your child to use the number line for Exercise 2 and describe how to estimate the sum of 215 + 398.

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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.



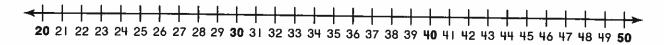
An estimate of the difference is \_\_\_\_\_\_\_.

## 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



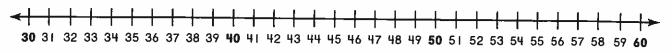
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**Math Talk** How do you know which two tens a number is between?

#### On Your Own

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

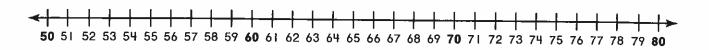
**2.** Estimate the difference of 51 - 39.



\_\_\_\_\_ - \_\_\_\_ = \_\_\_\_

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 — 41.

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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.



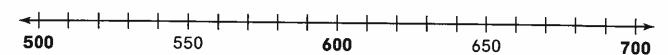
An estimate of the difference is\_\_\_\_\_\_\_

## 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.



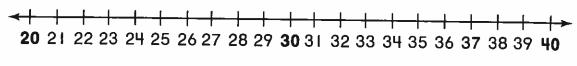
### **Concepts and Skills**

1. Write the missing sums in the addition table.

+	0	1	2	3	4	5	6	7	8	9	10
0	0		2	3	4	5		7		9	
112	1	2	3	4	5		7		9		11
2	2	3	<b></b>	5		7		9		11	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.

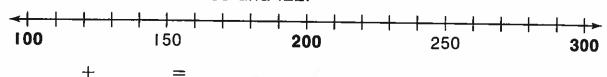
2. Estimate the sum of 24 and 36.



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.

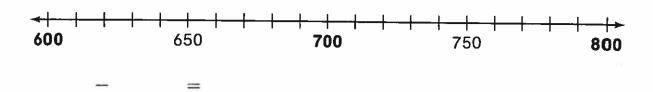
**4.** Estimate the difference of 72 - 59.



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?

350 < 413 < \_\_\_\_\_.

- 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.



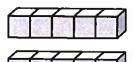
**Math Talk** How can you use counters to find 2+2+2+2+2?

## **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.

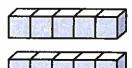
3 groups of 5 is 15 in all.

#### Share and Show

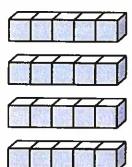


Complete the sentence to show how many in all.

I.



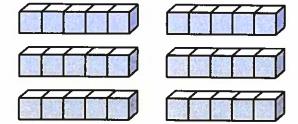
2.



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.

groups of  $\underline{\underline{}}$  is  $\underline{\underline{}}$  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 Explain.

How many groups of ten are in 70?

#### On Your Own

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.

GR22 twenty-two

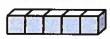
# Concepts and Skills

Complete the sentence to show how many in all.

ı. ) ) ) ) ) ) ) ) ) ) ) ) ) )

\_\_\_\_ groups of \_\_\_\_ is \_\_\_\_ in all.

2.



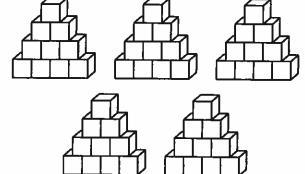






\_\_\_\_ groups of \_\_\_\_ is \_\_\_ in all.

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?
	0 7
	O 9
	O 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?

## **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.

1.

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I hour before

I hour after



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.

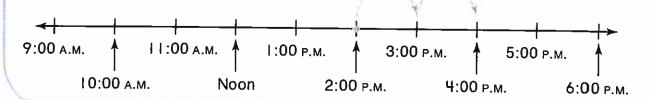




\_\_\_ hours

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?





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

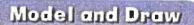
\_\_\_ minutes

Math Talk

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

#### Fraction Models: Thirds and Sixths

Essential Question How can you identify thirds and sixths?





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

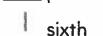
6 equal parts or 6 sixths

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\_ part of 3 equal parts or

th.	irc
	th

\_ part of 6 equal parts or



#### Share and Show



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

1		
•		
		1
		1

l .	I .
l .	
l .	
l .	1
l .	
l .	
l .	1
l .	1
l .	l
l .	I
 l .	l

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

3.			



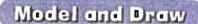


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Math Talk How are 3 thirds and 6 sixths alike?

## Fraction Models: Fourths and Eighths

Essential Question How can you identify fourths and eighths?





4 equal parts or 4 fourths



8 equal parts or 8 eighths



part of 4 equal parts or

fourth

2 - A - 1			
 185			

\_ part of 8 equal parts or

eighth

## Share and Show



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

•		

2.

- 1	1		
	1		
- 1	1		
- 11	I -	- 1	
	10		
300	100		

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

3.				
	1			





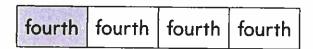
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Math Talk How are 4 fourths and 8 eighths alike?

## **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 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?