

Attainment's

LOOK at

MATH



Don Bastian • Heidi Barnhill

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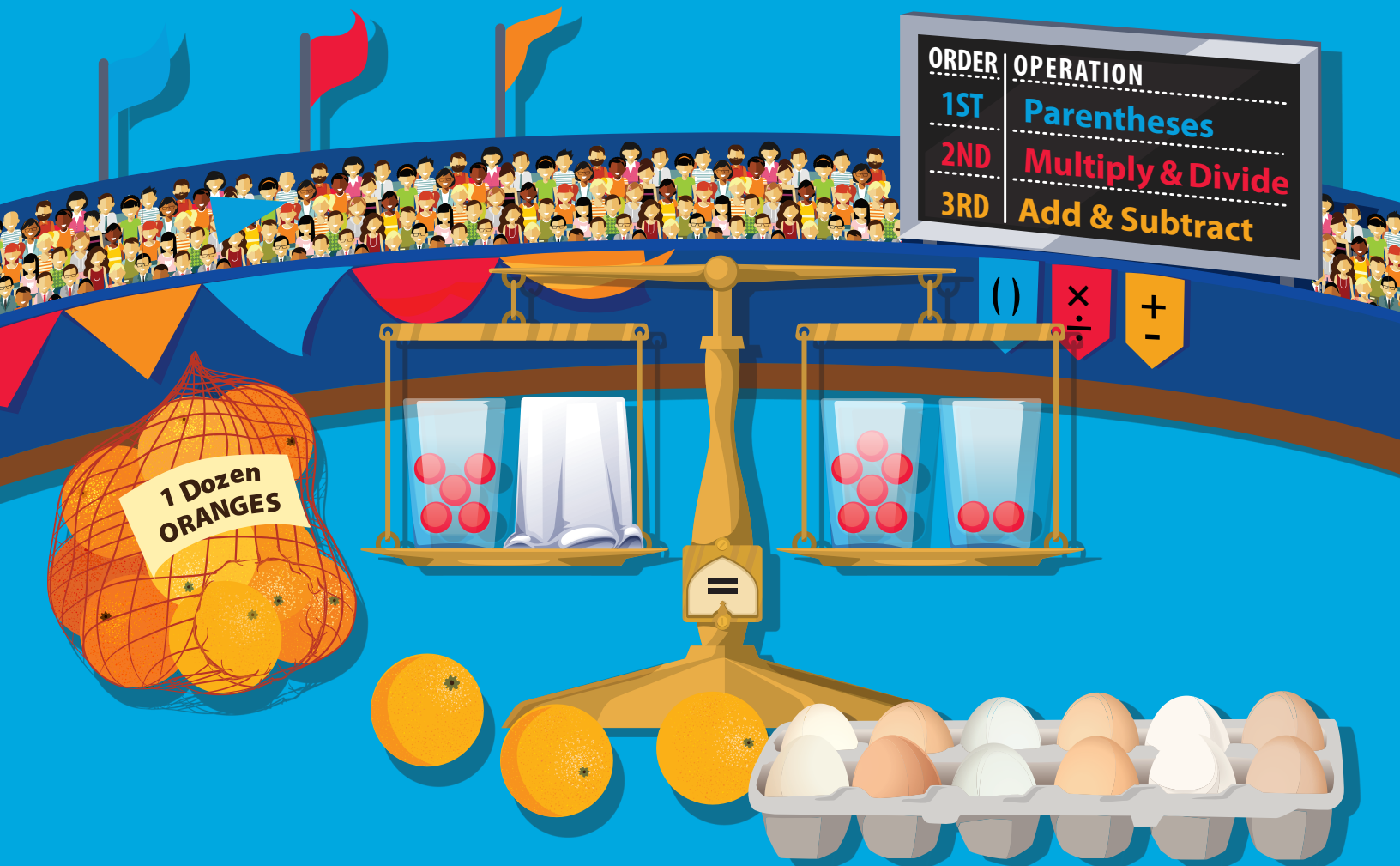
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# UNIT ONE

# NUMBERS

Add and Subtract • Multiply and Divide  
Positive and Negative Numbers • Algebra



# CHAPTER 1



Big Ideas

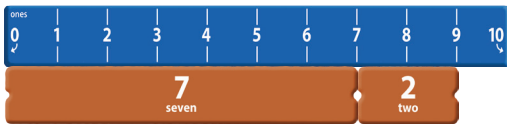
## Add and Subtract

Zero (0) added to or subtracted from any number is still that number.

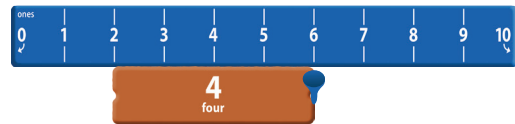
$$8 + 0 = 8$$

$$8 - 0 = 8$$

The order of the numbers doesn't matter in **addition**, but it does matter in **subtraction**.



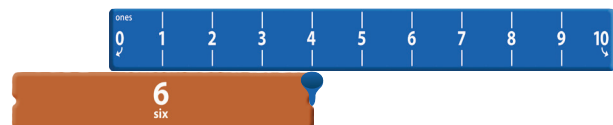
$$7 + 2 = 9$$



$$6 - 4 = 2$$



$$2 + 7 = 9$$



$$4 - 6 = \textcircled{2}$$

Problems can be written

across

$$7 - 2 = 5$$

or

up and  
down.

$$\begin{array}{r} 6 \\ + 4 \\ \hline 10 \end{array}$$



# Vocabulary

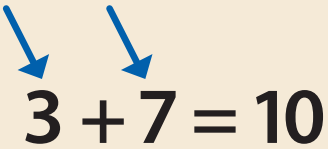

Addition	$3 + 6 = 9$	Combine numbers together to make a bigger number
Subtraction	$7 - 2 = 5$	Take away from a number to make it smaller
Sum	$3 + 7 = 10$	The total when you add numbers
Difference	$7 - 3 = 4$	The total when you subtract numbers



## Find the Word

The total when you subtract numbers

\_\_\_\_\_

Plus sign	$+$	Used when you add numbers
Minus sign	$-$	Used when you subtract numbers
Addend	$3 + 7 = 10$ 	Any number being added
Place value	$51$ 	The value of a digit based upon its position in a number



## Find the Word

A sign used when you add numbers

\_\_\_\_\_



# Topic 1 Add and Subtract Within 10

Look at the picture and complete the math problem.



$$\square + 5 = 7$$

Addition—Write the **sum** in the box.



$$7 + 2 = \square$$

$$\begin{array}{r} 6 \\ +4 \\ \hline \end{array}$$



$$\begin{array}{r} 5 \\ +3 \\ \hline \end{array}$$



$$\square + 5 = 6$$



Subtraction—Write the **difference** in the box.

Blue pegs mark the first number in the problem. Number pieces show how many to take away.



$$10 - 5 = \square$$



$$\begin{array}{r} 6 \\ - 3 \\ \hline \square \end{array}$$



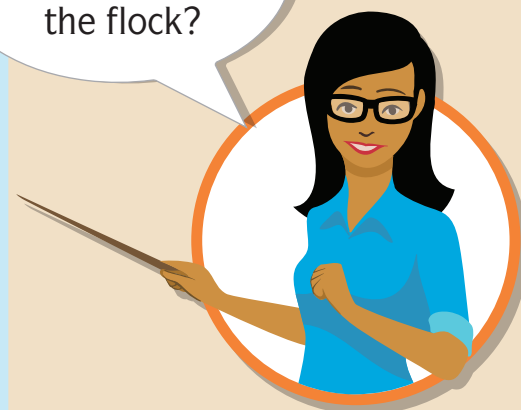
$$8 - 2 = \square$$



$$\begin{array}{r} 7 \\ - 4 \\ \hline \square \end{array}$$



How many birds are leaving the flock?



$$7 - \square = 4$$



# Select Plus or Minus Sign

## In Focus

The **plus sign** is used in addition. The **minus sign** is used in subtraction. See if the problems below are addition or subtraction. Then **circle** the correct sign.



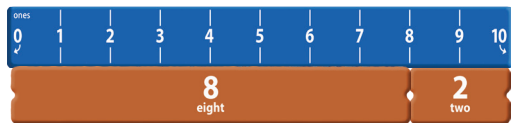
$$6 \begin{array}{c} + \\ - \end{array} 2 = 8$$

$$\begin{array}{r} + 9 \\ - 4 \\ \hline 5 \end{array}$$



$$7 \begin{array}{c} + \\ - \end{array} 1 = 6$$

$$\begin{array}{r} + 4 \\ - 3 \\ \hline 7 \end{array}$$



$$8 \begin{array}{c} + \\ - \end{array} 2 = 10$$

$$\begin{array}{r} + 5 \\ - 3 \\ \hline 2 \end{array}$$



## Story

On Saturday, Mila cleaned and swept her room. Under her bed she found **7** socks and **3** books. How many things altogether were under Mila's bed?

$$\boxed{7} + \boxed{3} = \boxed{\phantom{00}}$$

# Add and Subtract Within 10



## Quiz

1

$$\begin{array}{r} 6 \\ + 1 \\ \hline \square \end{array}$$

2

$$1 + 6 = \square$$

3

True or False

$$6 + 0 = 6$$

4

$$\begin{array}{r} 9 \\ - 4 \\ \hline \square \end{array}$$

5

$$2 + 7 = \square$$

6

Circle the sum.

$$6 + 2 = 8$$

7

$$\begin{array}{r} 7 \\ - 3 \\ \hline \square \end{array}$$

8

$$10 - 8 = \square$$

9

Circle the difference.

$$7 - 2 = 5$$

10

$$\begin{array}{r} 5 \\ + 4 \\ \hline \square \end{array}$$

11

$$3 - 2 = \square$$

12

Write the signs in the boxes.

<input type="text"/>	<input type="text"/>
plus	minus

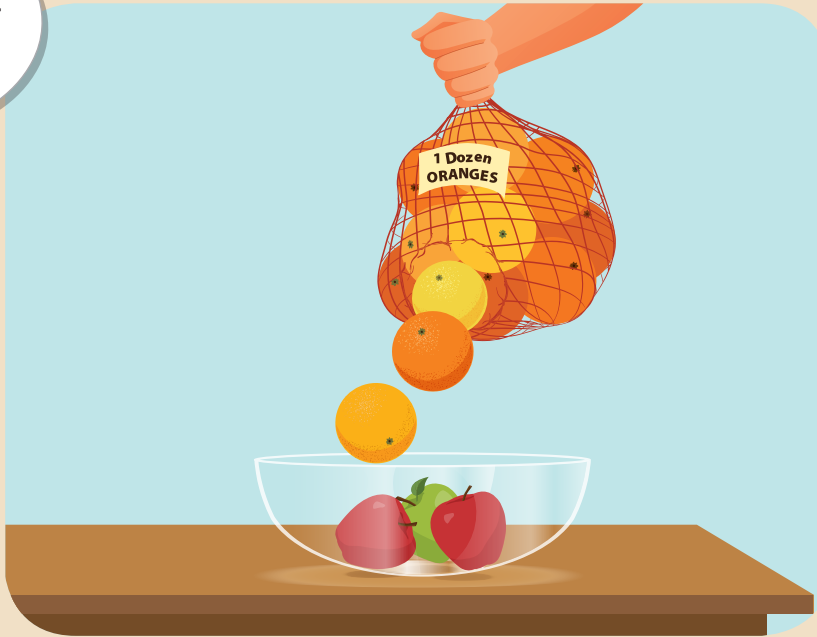
As Gerald was walking his dog, he saw 9 geese standing by a pond. His dog barked and 6 flew away. How many geese were left?



$$\square - \square = \square$$

# Topic 2 Add and Subtract Within 20

How many pieces of fruit will be in the bowl?



$$3 + 12 = \square$$

**Fun fact:** A dozen equals 12.

Addition—Write the sum in the box.



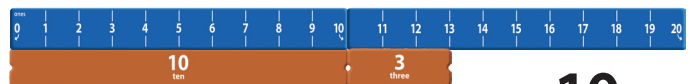
$$5 + 8 = \square$$



$$\begin{array}{r} 9 \\ + 6 \\ \hline \square \end{array}$$

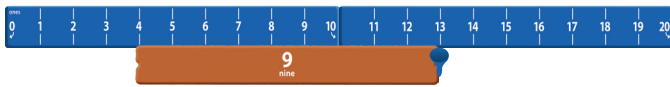


$$10 + 7 = \square$$

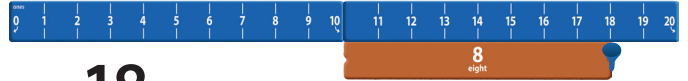


$$\begin{array}{r} 10 \\ + 3 \\ \hline \square \end{array}$$

Subtraction—Write the difference in the box.



$$13 - 9 = \square$$



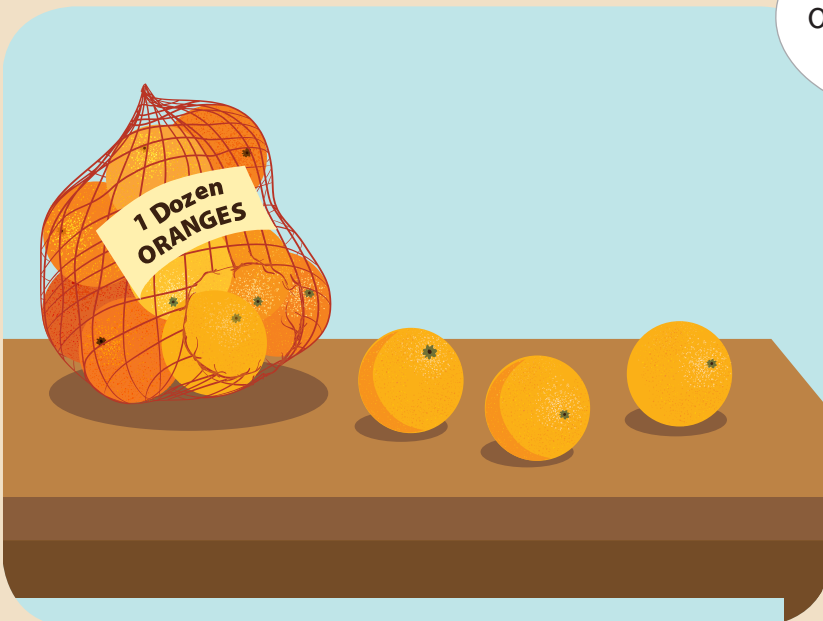
$$\begin{array}{r} 18 \\ - 8 \\ \hline \square \end{array}$$



$$16 - 10 = \square$$



$$\begin{array}{r} 14 \\ - 6 \\ \hline \square \end{array}$$



How many oranges are left in the bag?



$$12 - 3 = \square$$



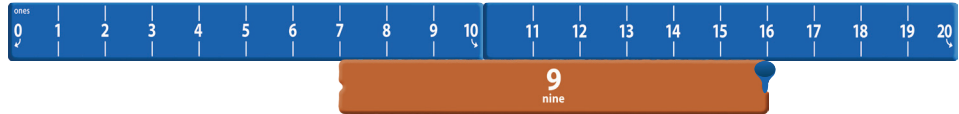
# Check Subtraction with Addition

## In Focus

You can use addition to check the answer to a subtraction problem. Take the number you subtracted, add it to the difference, and you should get the number you started with.

$$16 - 9 = 7$$

$$9 + 7 = 16$$



Change these subtraction problems into addition problems.

$$16 - 5 = 11$$

$$\boxed{5} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$11 - 7 = 4$$

$$\boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$10 - 1 = 9$$

$$\boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$12 - 0 = 12$$

$$\boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$15 - 10 = 5$$

$$\boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$20 - 10 = 10$$

$$\boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

## Story

Carsten likes music CDs. He has **14** in his collection. For his birthday, his friends gave him **3** more. How many CDs does Carsten have now?

$$14 + 3 = \boxed{\phantom{00}}$$

# Add and Subtract Within 20



## Quiz

1

$$\begin{array}{r} 7 \\ + 3 \\ \hline \square \end{array}$$

2

$$5 + 7 = \square$$

3

Plus or minus?

$$12 \square 3 = 9$$

4

$$\begin{array}{r} 15 \\ - 6 \\ \hline \square \end{array}$$

5

$$9 + 4 = \square$$

6

Solve the problem.

$$\square + 4 = 13$$

7

$$\begin{array}{r} 20 \\ - 4 \\ \hline \square \end{array}$$

8

$$16 - 8 = \square$$

9

Circle the difference.

$$20 - 5 = 15$$

10

$$\begin{array}{r} 8 \\ + 8 \\ \hline \square \end{array}$$

11

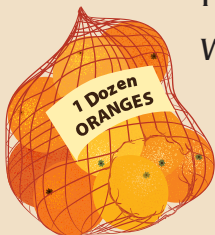
$$14 - 5 = \square$$

12

Circle the sum.

$$9 + 9 = 18$$

Amy bought a bag of 12 oranges to make a fruit salad, but her brother and his friends ate 7 oranges. How many oranges were left in the bag?

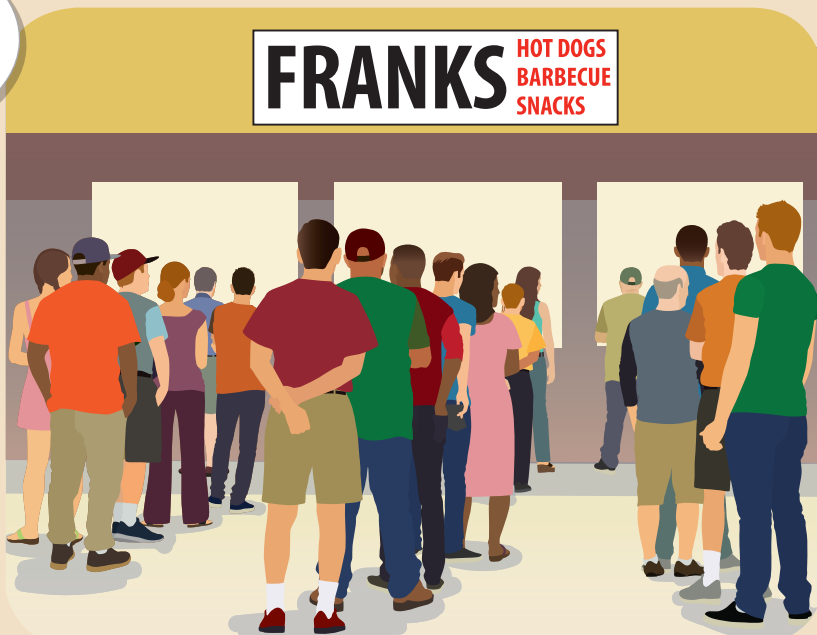


$$\square - \square = \square$$



# Topic 3 Add and Subtract with Three Terms

How many people are in line to get food?



$$\square + \square + \square = 18$$

**Fun fact:** We use the word "term" to refer to any number in a math problem other than the answer.

Write the missing **addends** in the box.



$$5 + 1 + \square = 10$$



$$6 + 2 + \square = 9$$



$$\square + 4 + 7 = 16$$

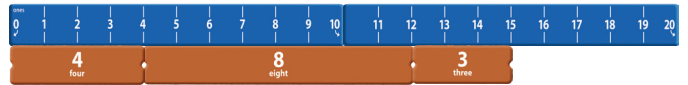


$$9 + \square + 8 = 20$$

Write the sum in the box.



$$6 + 4 + 9 = \square$$



$$4 + 8 + 3 = \square$$



$$10 + 3 + 5 = \square$$



$$7 + 6 + 1 = \square$$



The lines are shorter now. How many are still waiting?



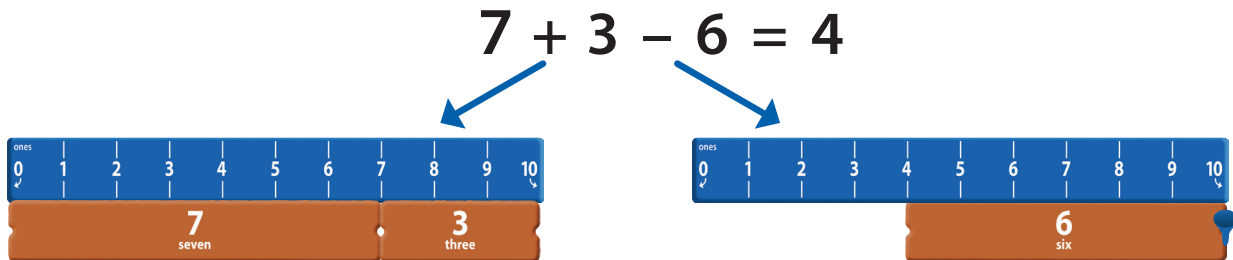
$$3 + \square + \square = \square$$



# Subtract the Last Term

## In Focus

You can add and subtract within the same problem. In the problem below, start with 7, add 3, and subtract 6 to get the total.



Write the answer in the box.

$4 + 5 - 2 = \square$

$6 + 3 - 4 = \square$

$5 + 5 - 1 = \square$

$3 + 7 - 8 = \square$

$2 + 8 - 9 = \square$

$7 + 2 - 5 = \square$

## Story

Mikah was playing Pokémon. He started with 9 Pokéballs and earned 8 more. Then he used 6 to catch a Pokémon. How many Pokéballs did he have left?

$9 + 8 - 6 = \square$

# Add and Subtract with Three Terms



## Quiz

1

$10 + 2 + 7 = \square$

2

$4 + \square + 6 = 20$

3

True or False

$8 + 3 + 3 = 14$

4

$7 + 3 - 5 = \square$

5

$\square + 5 + 6 = 14$

6

Circle the addends.

$3 + 2 + 5 = 10$

7

$\square + 2 + 7 = 13$

8

$3 + 4 - 2 = \square$

9

Write the plus or minus sign in the box.

$2 + 3 \square 3 = 8$

10

$4 + 5 - 3 = \square$

11

$\square + 5 + 3 = 12$

12

Write the plus or minus sign in the box.

$2 + 8 \square 4 = 6$

**FRANKS** HOT DOGS  
BARBECUE  
SNACKS

Joe was selling hot dogs at the game. During halftime one family bought 7 hot dogs. Another family bought 6 and his teacher, Mr. Roth, bought 3. How many hot dogs did Joe sell?

$\square + \square + \square = \square$

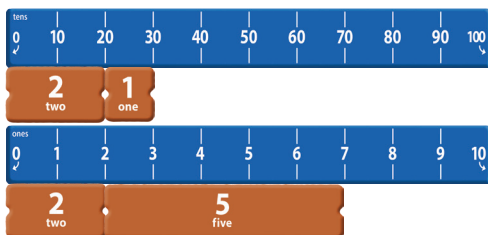
# Topic 4 Add and Subtract Within 100

How many fans are walking into the stands?

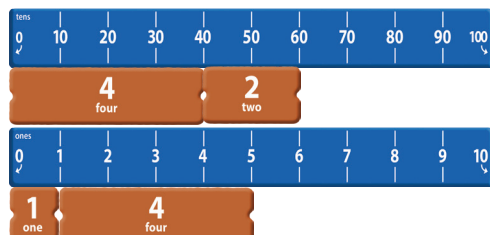


$$40 + 8 = \square$$

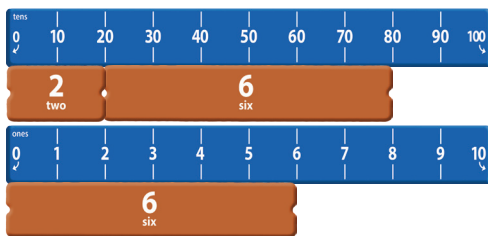
Write the sum in the box.



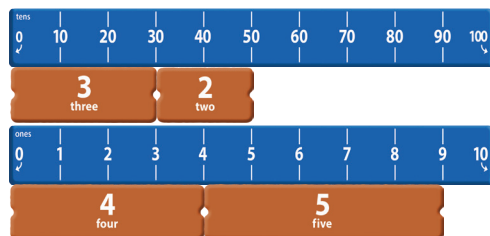
$$22 + 15 = \square$$



$$41 + 24 = \square$$

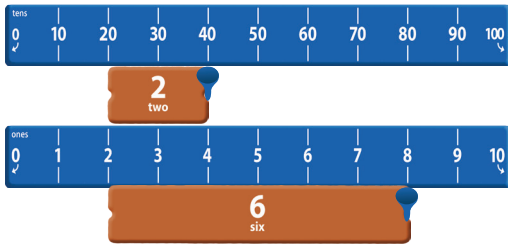


$$26 + 60 = \square$$

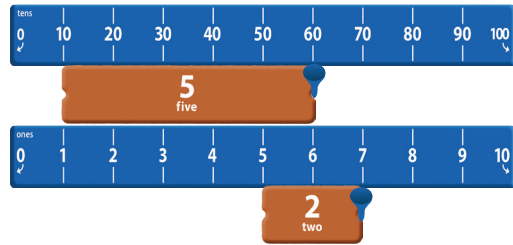


$$34 + 25 = \square$$

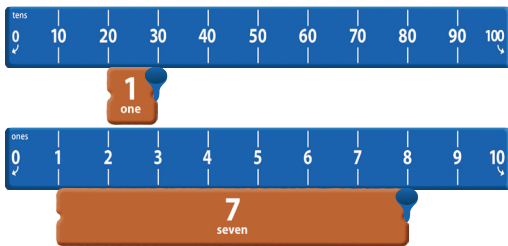
Write the difference in the box.



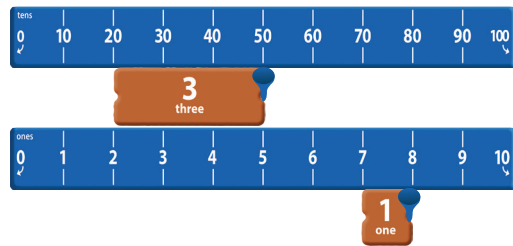
$$48 - 26 = \square$$



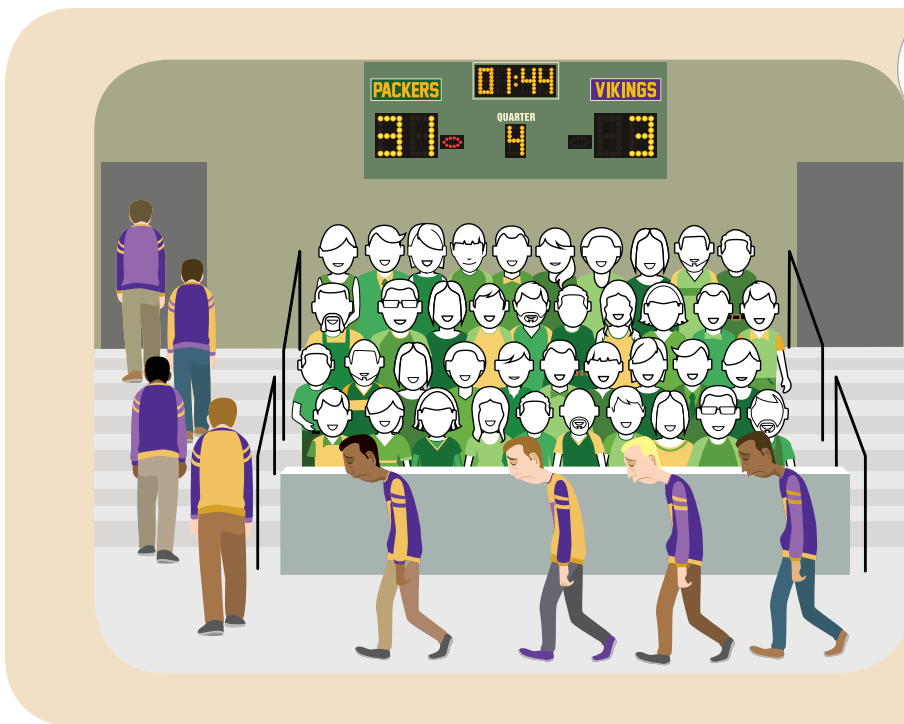
$$67 - 52 = \square$$



$$38 - 17 = \square$$



$$58 - 31 = \square$$



Why do you think they are leaving?



$$48 - 8 = \square$$



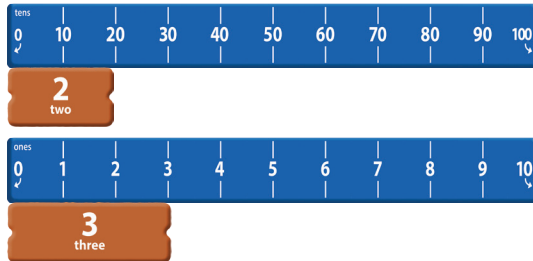
# Place Values

## In Focus

The position of the numbers is important. In the number **23**, **2** is in the tens place, and **3** is in the ones place.

$$20 + 3 = 23$$

The sum is also written as:



tens	ones
2	3

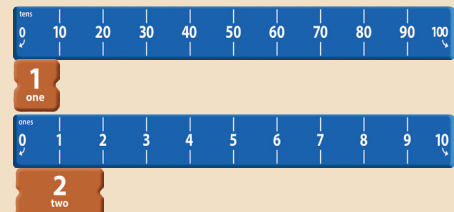
Write the **place values** for these numbers. Put the number of tens in the tens box and the number of ones in the ones box.

<table border="1"> <thead> <tr> <th>tens</th> <th>ones</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table> <p>Number line for 63: 'tens' line from 0 to 100 with a bar from 0 to 60 labeled '6 six'; 'ones' line from 0 to 10 with a bar from 0 to 3 labeled '3 three'.</p>	tens	ones			<table border="1"> <thead> <tr> <th>tens</th> <th>ones</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table> <p>Number line for 71: 'tens' line from 0 to 100 with a bar from 0 to 70 labeled '7 seven'; 'ones' line from 0 to 10 with a bar from 0 to 1 labeled '1 one'.</p>	tens	ones			<table border="1"> <thead> <tr> <th>tens</th> <th>ones</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table> <p>Number line for 82: 'tens' line from 0 to 100 with a bar from 0 to 80 labeled '8 eight'; 'ones' line from 0 to 10 with a bar from 0 to 2 labeled '2 two'.</p>	tens	ones		
tens	ones													
tens	ones													
tens	ones													

Here are two ways to look at **10 + 2 = 12**.  
Fill in and compare the place values.



tens	ones



tens	ones

# Add and Subtract Within 100



## Quiz

1 
$$\begin{array}{r} 55 \\ - 33 \\ \hline \square \end{array}$$

2 
$$\begin{array}{r} 27 \\ + 52 \\ \hline \square \end{array}$$

3 
$$\begin{array}{r} 32 \\ + 40 \\ \hline \square \end{array}$$

4 
$$\begin{array}{r} 21 \\ + 65 \\ \hline \square \end{array}$$

5 
$$\begin{array}{r} 68 \\ - 33 \\ \hline \square \end{array}$$

6 
$$\begin{array}{r} 35 \\ - 11 \\ \hline \square \end{array}$$

7 
$$\begin{array}{r} 34 \\ + 30 \\ \hline \square \end{array}$$

8 
$$\begin{array}{r} 99 \\ - 52 \\ \hline \square \end{array}$$

9 Write the place values in the boxes.

	tens	ones
58	<input type="text"/>	<input type="text"/>

10 Write the place values in the boxes.

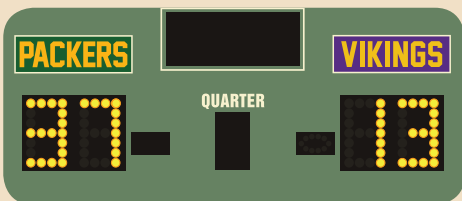
	tens	ones
49	<input type="text"/>	<input type="text"/>

11 Write the place values in the boxes.

	tens	ones
30	<input type="text"/>	<input type="text"/>

12 Write the place values in the boxes.

	tens	ones
18	<input type="text"/>	<input type="text"/>



Here is the final score of the game. By how many points did the Packers defeat the Vikings?

$$\square - \square = \square$$