

*ThemeVille*TM
Math
See the themes behind the details

Avi Patil, Ph.D.

Published by
Epistology Learning, LLC

ThemeVille Math 1

Worktext

Second Edition

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Printed in the United States of America.

ISBN: 978-1-64102-036-7

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Published by

Epistology Learning, LLC

P.O. Box 20723

Louisville KY 40250

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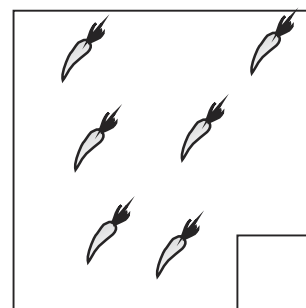
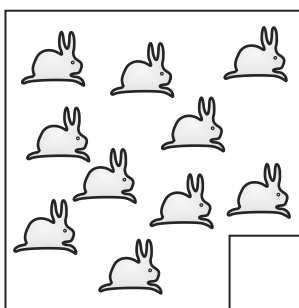
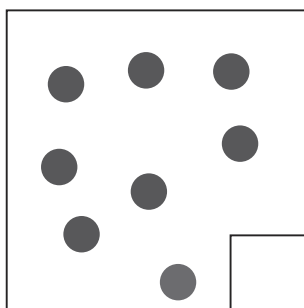
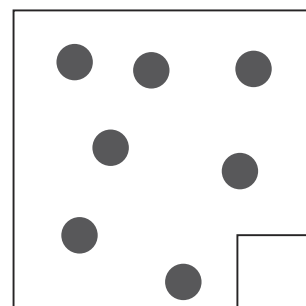
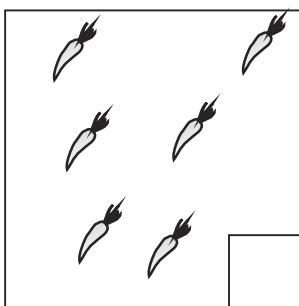
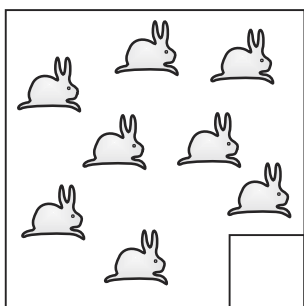
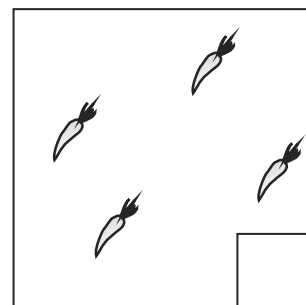
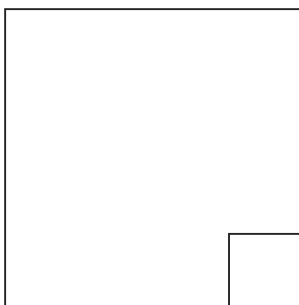
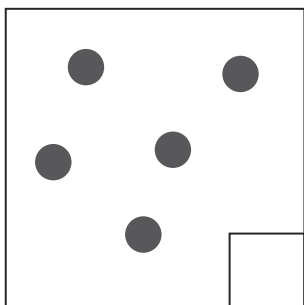
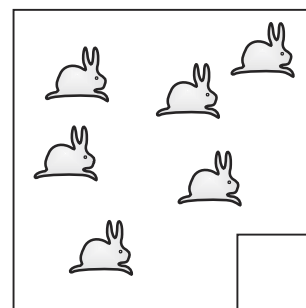
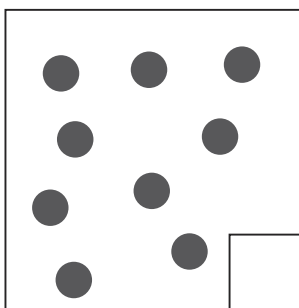
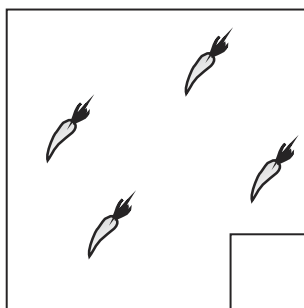
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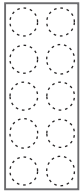
Counting 0-10

To the Teacher: As you go through the first section, ask the student to count aloud.

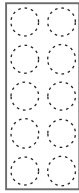
Count and write the numbers.



Fill as many number of dots as the numbers given below.



5



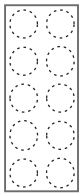
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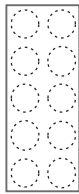
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6



1



10

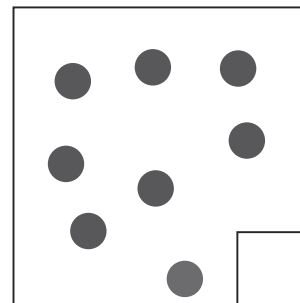
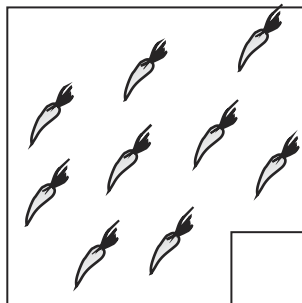
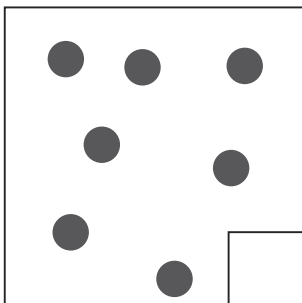
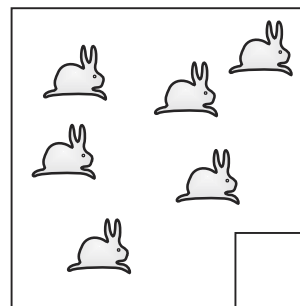
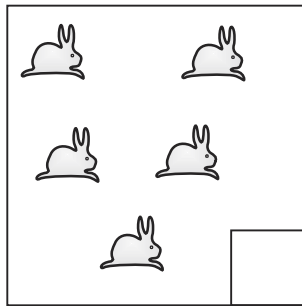
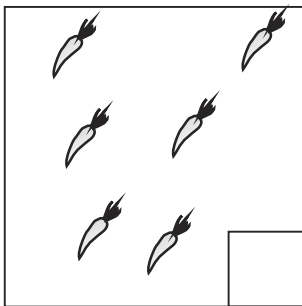


0



9

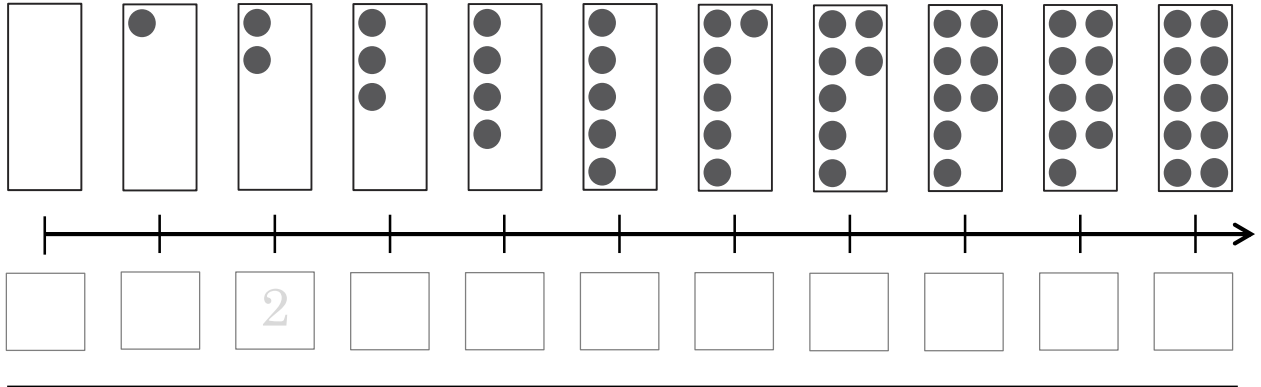
Count and write the numbers.



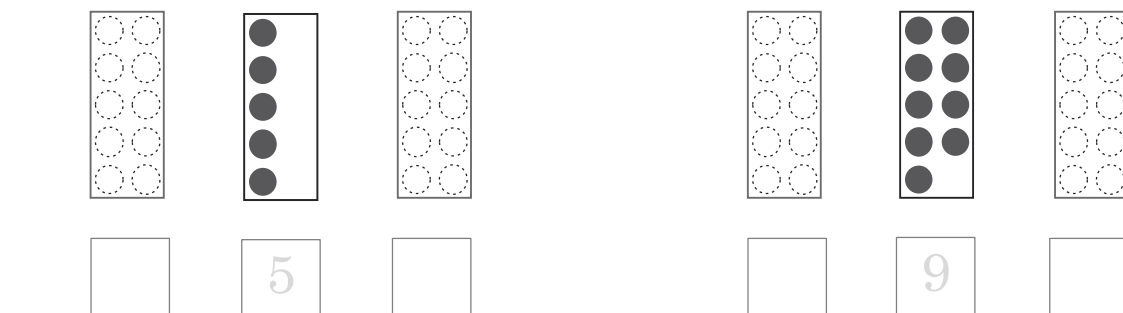
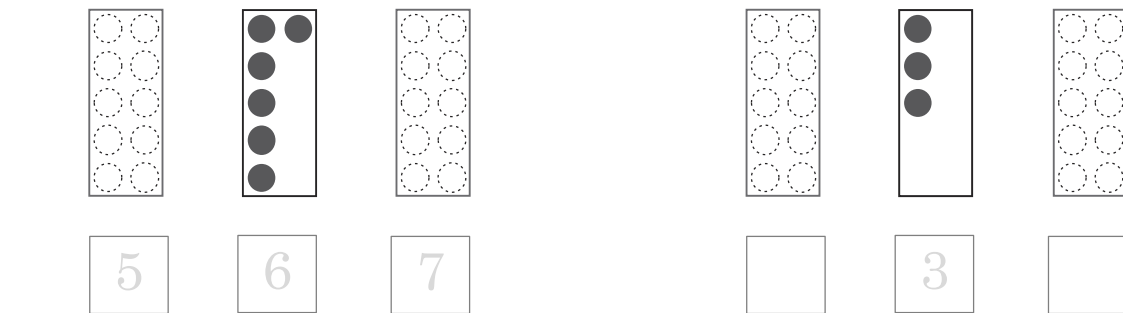
Forward/Backward Counting

To the Teacher: As you go through the first section, ask the student to count aloud.

Fill in the numbers:



Write the numbers that come before and after the middle number:



Write in ascending/descending order:

0	1	2	3							
10	9	8	7							

Sample page

Write the numbers that come before and after the middle number:

3	4	5			6	
	7				3	
	1				9	
	5				8	

Fill the missing numbers:

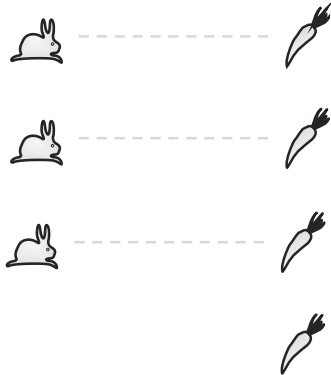
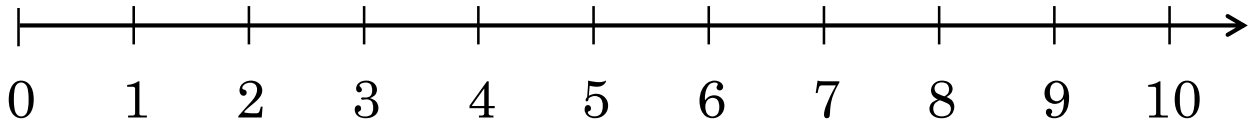
2	3			6	7				
0	1	2							
1	2	3							

Count forward or backward:

1	2	3							
10	9	8							
8	7	6							
9	8	7							
7	6	5							

Comparison

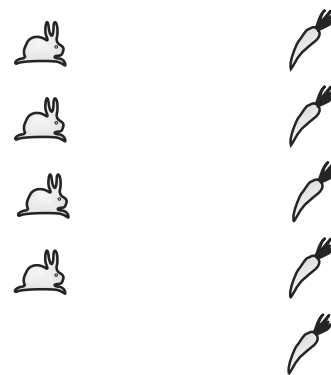
Circle the smaller number for each pair:



3 is smaller than 4

3

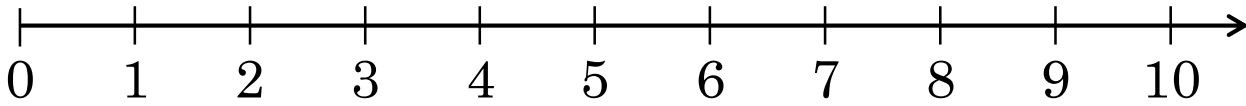
4










is smaller than










7 1	2 8	4 8
6 5	7 9	3 2
0 10	1 8	2 10
9 2	4 2	8 3
5 6	5 4	6 2

Circle the bigger number for each pair:



	-----	
	-----	
	-----	
		

is bigger than

is bigger than

3 8	5 8	10 9
6 7	10 7	3 0
10 6	6 0	5 7
8 4	8 10	8 3
10 1	4 8	5 1

Addition 0-10

Adding the two numbers:



1

and



1

is



2

is

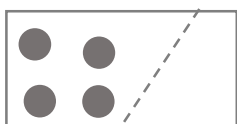
1



1



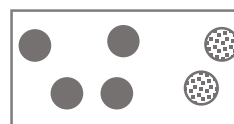
2



and



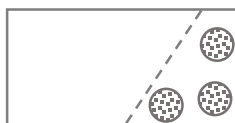
is



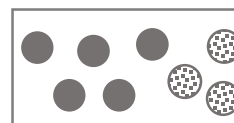
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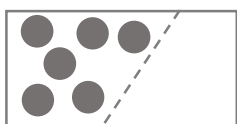
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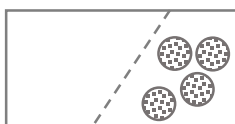
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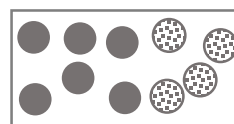
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and



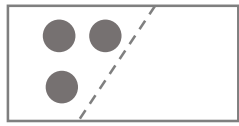
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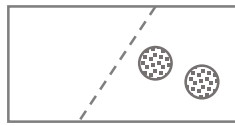
is



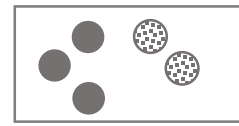
Order in Addition:

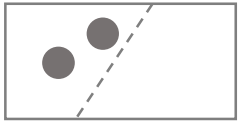


and

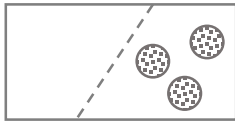


is

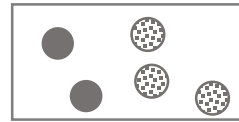




and



is



Write addition equations with a different order:

$$\boxed{3} + \boxed{2} = 5 \quad \Rightarrow \quad \boxed{2} + \boxed{3} = 5$$

$$\boxed{2} + \boxed{1} = \boxed{} \quad \Rightarrow \quad \boxed{1} + \boxed{} = \boxed{}$$

$$\boxed{4} + \boxed{2} = \boxed{} \quad \Rightarrow \quad \boxed{} + \boxed{} = \boxed{}$$

$$\boxed{3} + \boxed{1} = \boxed{} \quad \Rightarrow \quad \boxed{} + \boxed{} = \boxed{}$$

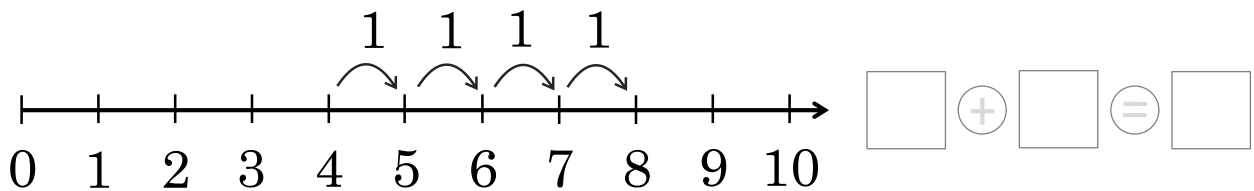
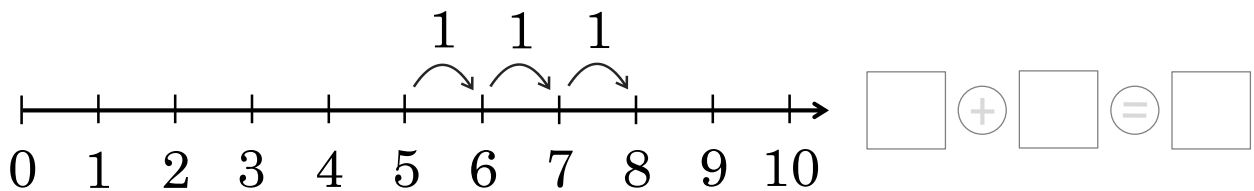
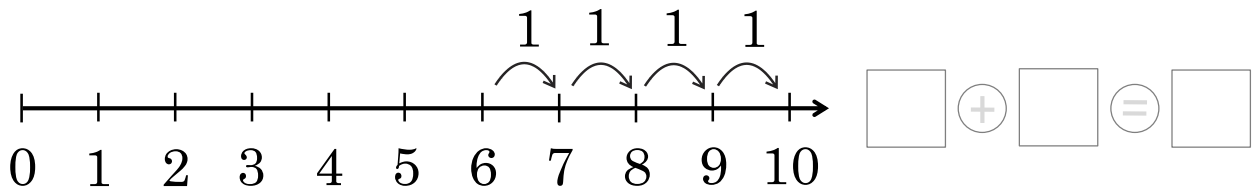
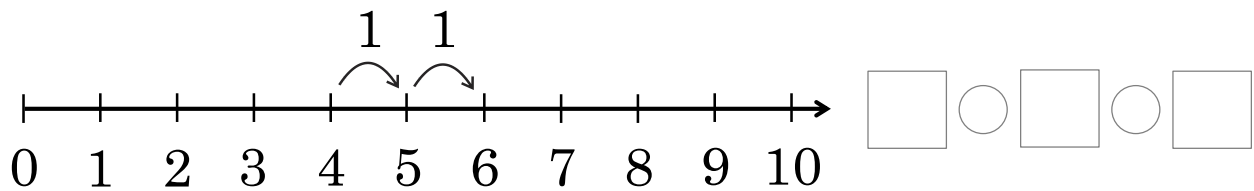
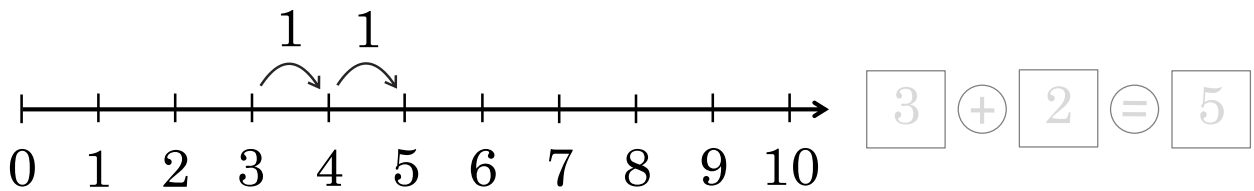
$$\boxed{5} + \boxed{4} = \boxed{} \quad \Rightarrow \quad \boxed{} + \boxed{} = \boxed{}$$

$$\boxed{9} + \boxed{1} = \boxed{} \quad \Rightarrow \quad \boxed{} + \boxed{} = \boxed{}$$

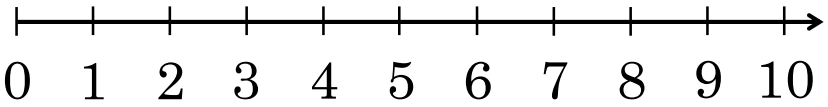
$$\boxed{7} + \boxed{2} = \boxed{} \quad \Rightarrow \quad \boxed{} + \boxed{} = \boxed{}$$

Addition with number lines

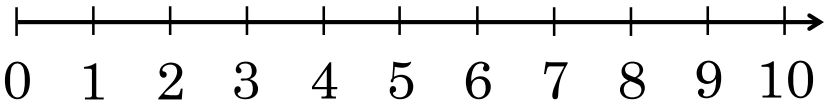
Write an addition equation for the hops shown on the number line below:



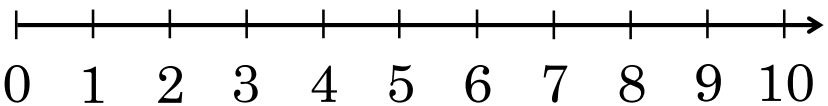
Draw hops starting from the **bigger** number:

$$8 + 2 = \square$$


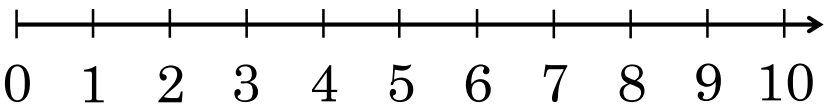
A horizontal number line with arrows at both ends, marked with integers from 0 to 10. The numbers are placed below the line.

$$4 + 6 = \square$$


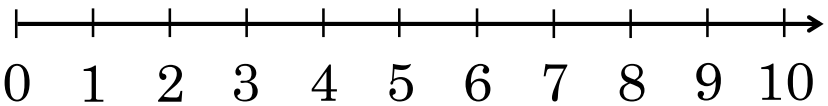
A horizontal number line with arrows at both ends, marked with integers from 0 to 10. The numbers are placed below the line.

$$5 + 3 = \square$$


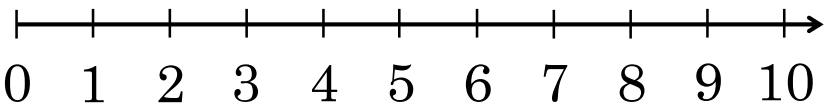
A horizontal number line with arrows at both ends, marked with integers from 0 to 10. The numbers are placed below the line.

$$1 + 8 = \square$$


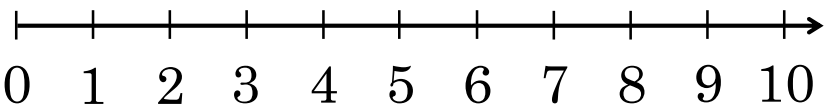
A horizontal number line with arrows at both ends, marked with integers from 0 to 10. The numbers are placed below the line.

$$8 + 1 = \square$$


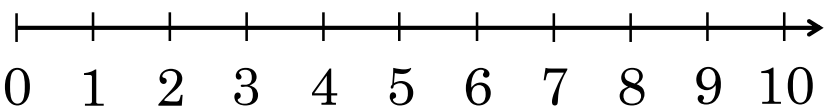
A horizontal number line with arrows at both ends, marked with integers from 0 to 10. The numbers are placed below the line.

$$2 + 8 = \square$$


A horizontal number line with arrows at both ends, marked with integers from 0 to 10. The numbers are placed below the line.

$$6 + 4 = \square$$


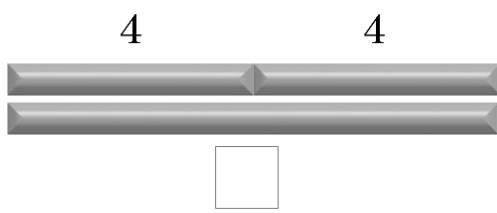
A horizontal number line with arrows at both ends, marked with integers from 0 to 10. The numbers are placed below the line.

$$3 + 5 = \square$$


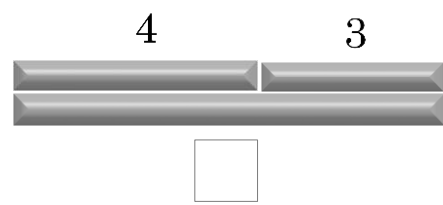
A horizontal number line with arrows at both ends, marked with integers from 0 to 10. The numbers are placed below the line.

Addition with bar diagrams

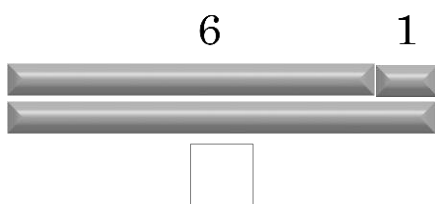
Find the unknown length and show with an addition equation:



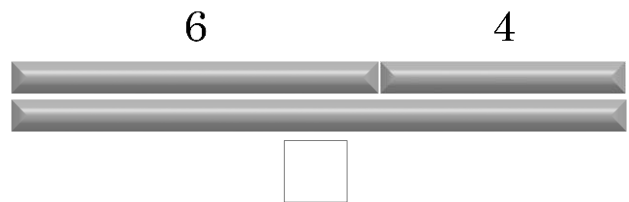
$$\boxed{4} + \boxed{4} = \boxed{}$$



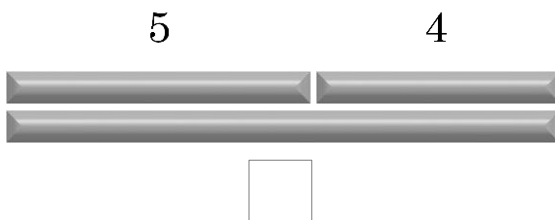
$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$



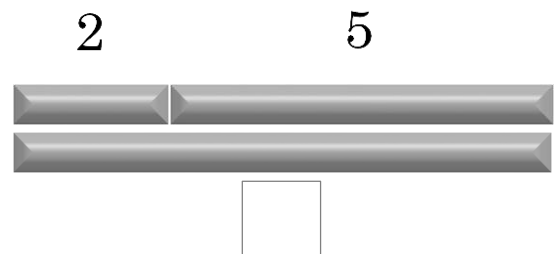
$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$



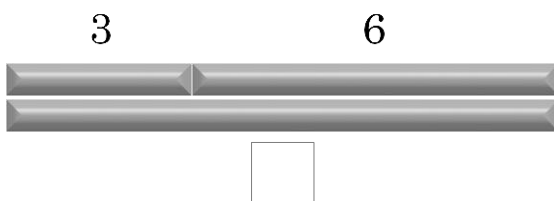
$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$



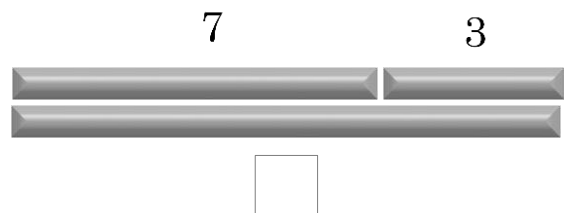
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$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$



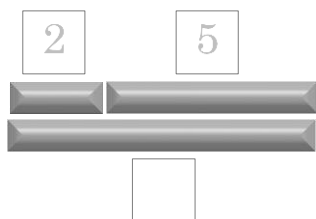
$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$



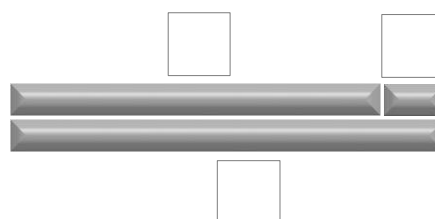
$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$

Show the addition equation with a diagram:

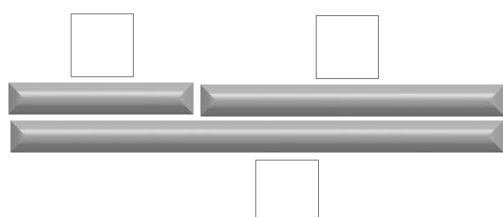
$$2 + 5 = \square$$



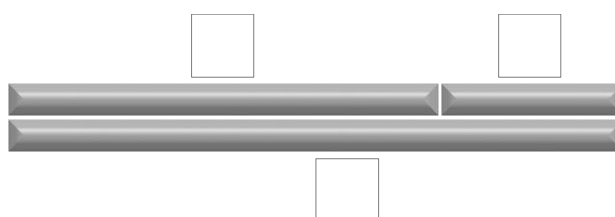
$$6 + 1 = \square$$



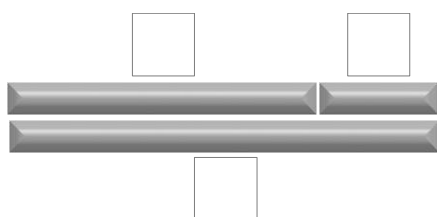
$$3 + 5 = \square$$



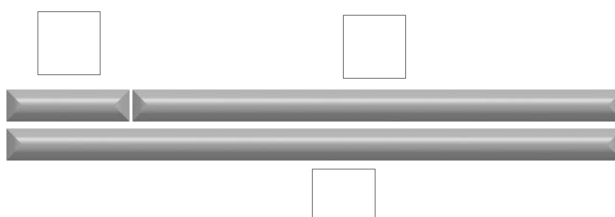
$$7 + 3 = \square$$



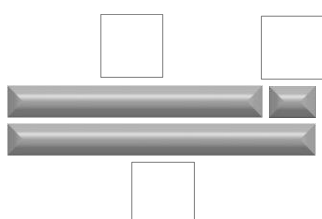
$$5 + 2 = \square$$



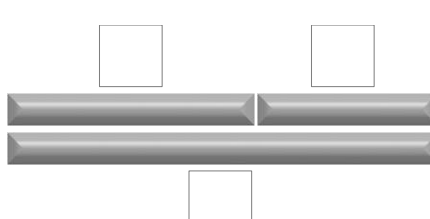
$$2 + 8 = \square$$



$$8 + 1 = \square$$



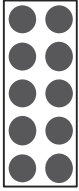
$$4 + 3 = \square$$




Numbers 0-20

To the Teacher: (1) Material needed: Place value strips for 1 to 10. (2) For each number from 11 to 19, please ask the student to overlay strips of 10 and a particular single digit to create the number.

Form numbers from 11 to 20 by filling the blanks.

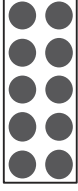


10




1

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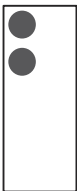
1

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11

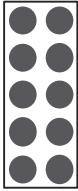


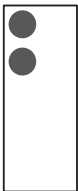
10



2

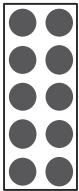
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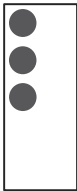


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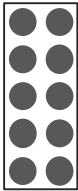


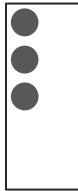
10



3

is

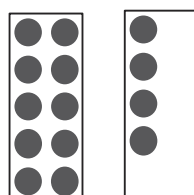
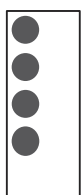
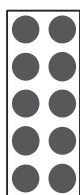




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Sample page



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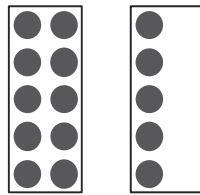
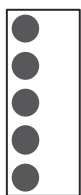
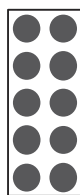
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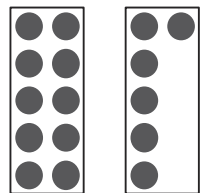
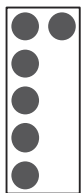
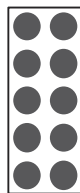
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and

6

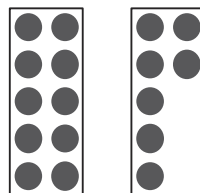
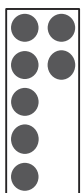
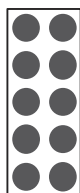
is



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10

and

7

is



+



=

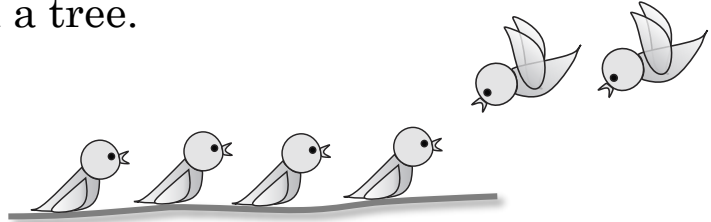


Word Problems

Solve the following problems:

To the Teacher: Please highlight the differences between addition and subtraction problems.

Four birds were sitting on a tree.
Two more birds flew in.

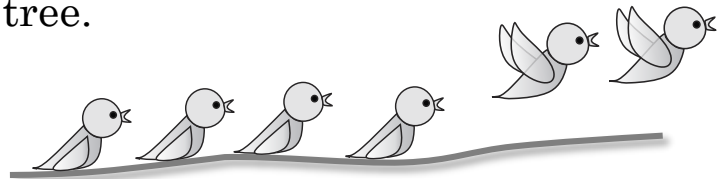


How many birds are there altogether?

$$\boxed{4} \bigcirc \boxed{2} = \boxed{}$$

There are birds altogether.

Six birds were sitting on a tree.
Two birds flew away.

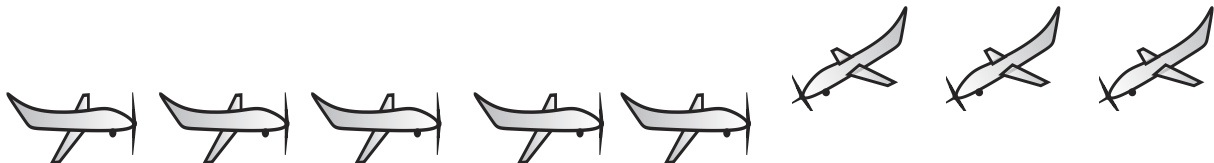


How many birds are left on the tree?

$$\boxed{6} \bigcirc \boxed{2} = \boxed{}$$

..... birds are left on the tree.

Five planes were on the ground.
Three more planes landed on the ground.



How many planes are there altogether?

$$\boxed{5} \bigcirc \boxed{3} = \boxed{}$$

..... planes are there altogether.

Eight planes were on the ground.
Two planes took off into the sky.

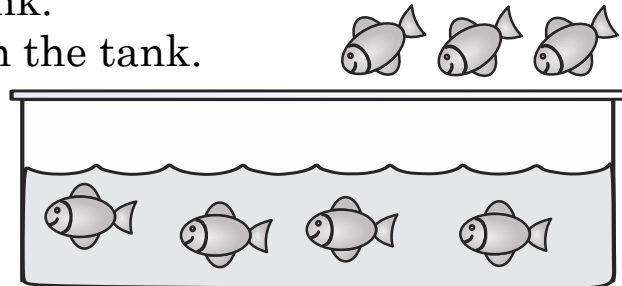


How many planes are left on the ground?

$$\boxed{8} \bigcirc \boxed{2} = \boxed{}$$

..... planes are left on the ground.

There were four fish in the tank.
Three more fish were added in the tank.

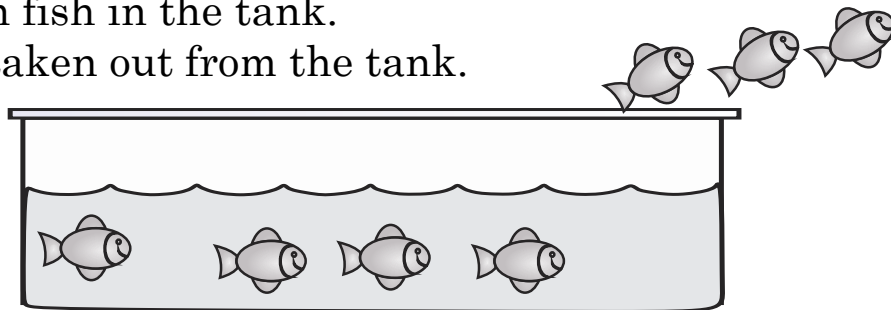


How many fish are there in tank altogether?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

There are fish in the tank altogether.

There were seven fish in the tank.
Three fish were taken out from the tank.



How many fish are left in the tank?

$$\boxed{7} \bigcirc \boxed{} = \boxed{}$$

..... fish are left in the tank.

Word Problems

Solve the following problems:

To the Teacher: Please highlight the differences between addition and subtraction problems.

Sam had four carrots.
He picked three more carrots.

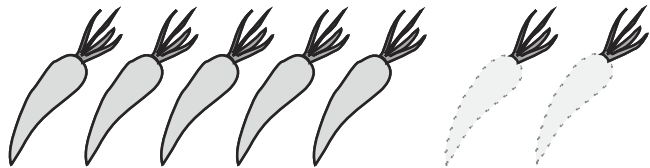


How many carrots does he have altogether?

$$\boxed{4} \bigcirc \boxed{3} = \boxed{}$$

He has carrots altogether.

Sam had seven carrots.
He ate two carrots.

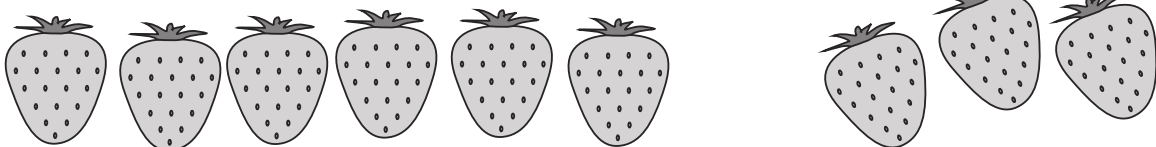


How many carrots does he have left?

$$\boxed{7} \bigcirc \boxed{2} = \boxed{}$$

He has carrots left.

Amy had six strawberries.
She picked three more strawberries.

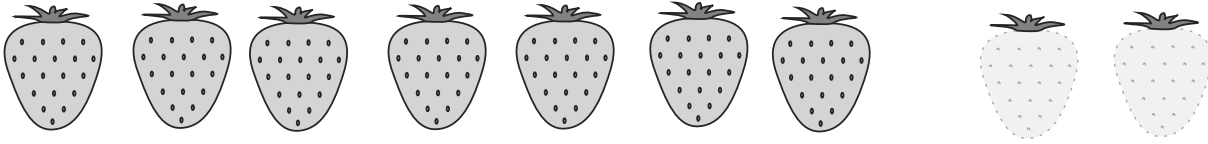


How many strawberries does she have altogether?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

She has strawberries altogether.

Amy had nine strawberries.
She ate two strawberries.

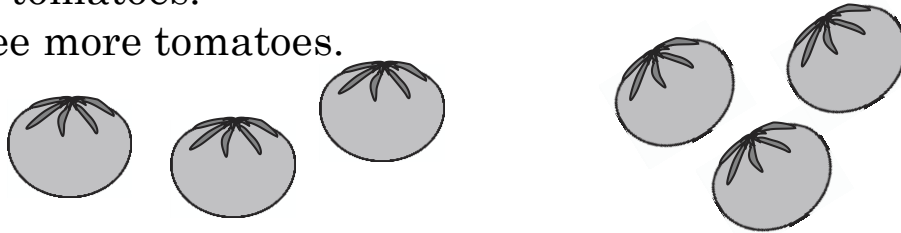


How many strawberries does she have left?

$$\boxed{9} \bigcirc \boxed{} = \boxed{}$$

She has strawberries left.

Ben had three tomatoes.
He picked three more tomatoes.

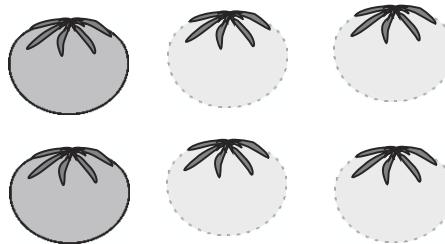


How many tomatoes he have altogether?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

He has tomatoes altogether.

Ben had six tomatoes.
He ate four tomatoes.



How many tomatoes does he have left?

$$\boxed{6} \bigcirc \boxed{} = \boxed{}$$

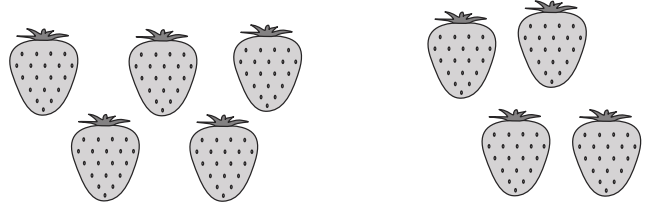
He has tomatoes left.

Word Problems

Solve the following problems.

To the Teacher: Please highlight the differences between addition and subtraction problems.

Tom has five strawberries.
Amy has four strawberries.

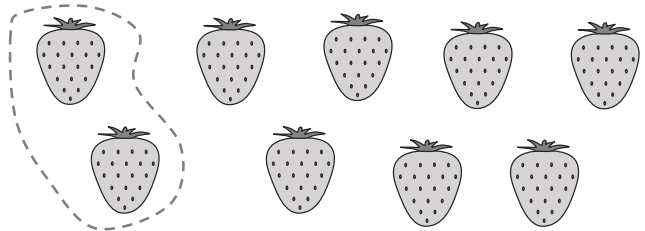


How many strawberries do they have altogether?

$$\boxed{5} \bigcirc \boxed{4} = \boxed{}$$

They have strawberries altogether.

Ben and Sue have nine strawberries altogether.
Ben has two strawberries.

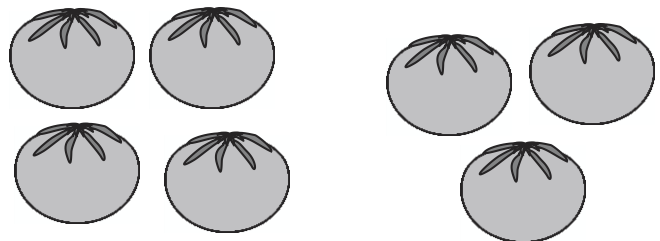


How many strawberries does Sue have?

$$\boxed{9} \bigcirc \boxed{2} = \boxed{}$$

Sue has strawberries.

Mark has four tomatoes.
Steve has three tomatoes.

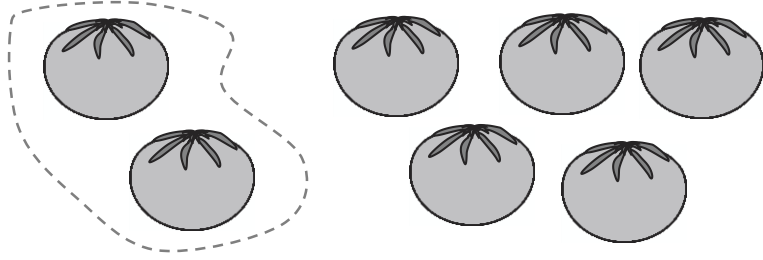


How many tomatoes do they have altogether?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

They have tomatoes altogether.

John and Larry have seven tomatoes altogether.
John has two tomatoes.



How many tomatoes does Larry have?

$$\boxed{7} \bigcirc \boxed{} = \boxed{}$$

Larry has tomatoes.

The first vase has three flowers.
The second vase has four flowers.

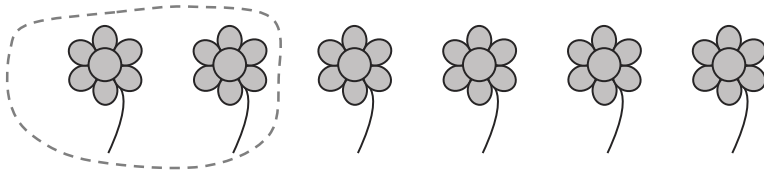


How many flowers do they have altogether?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

They have flowers altogether.

Two vases have six flowers altogether.
The first vase has two flowers.



How many flowers does the second vase have?

$$\boxed{6} \bigcirc \boxed{} = \boxed{}$$

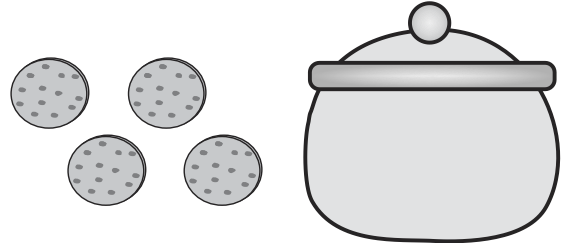
The second vase has flowers.

Word Problems

Solve the following problems:

To the Teacher: Please highlight the differences between addition and subtraction problems.

Four cookies are outside the jar.
Three cookies are inside the jar.

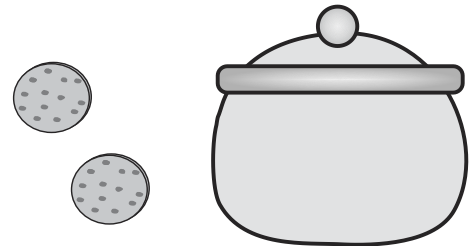


How many cookies are there altogether?

$$\boxed{4} \bigcirc \boxed{3} = \boxed{}$$

There are cookies altogether.

There are seven cookies altogether.
Two cookies are outside the jar.



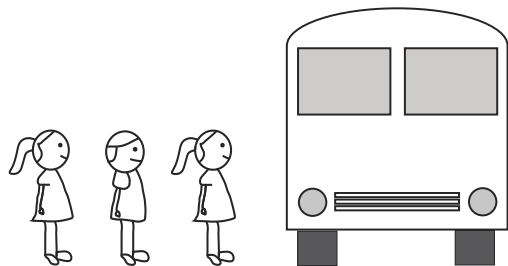
How many cookies are inside the jar?

$$\boxed{7} \bigcirc \boxed{2} = \boxed{}$$

..... cookies are inside the jar.

At the bus depot, three children are outside and five children are inside the bus.

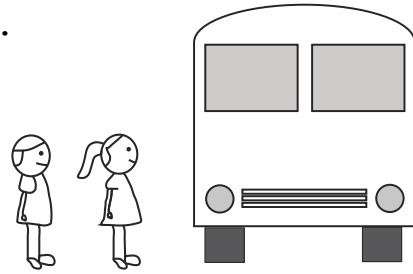
How many children are at the depot altogether?



$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

There are children at the bus depot altogether.

There are eight children at the bus depot.
Two children are outside the bus.

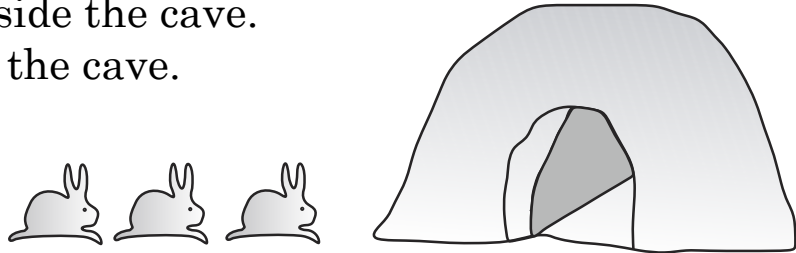


How many children are inside the bus?

$$\square \bigcirc \square = \square$$

..... children are inside the bus.

Three rabbits are outside the cave.
Six rabbits are inside the cave.

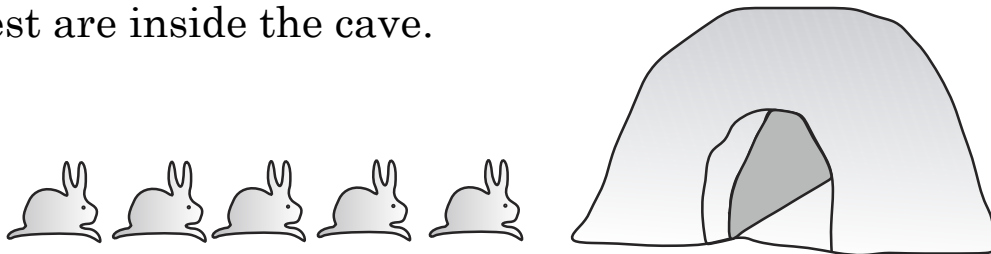


How many rabbits are there altogether?

$$\square \bigcirc \square = \square$$

There are rabbits altogether.

There are nine rabbits altogether. Five rabbits are outside the cave; rest are inside the cave.



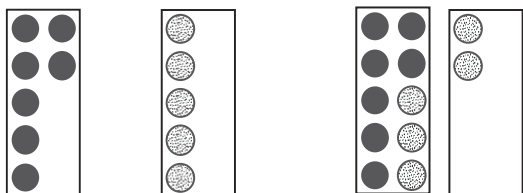
How many rabbits are inside the cave?

$$\square \bigcirc \square = \square$$

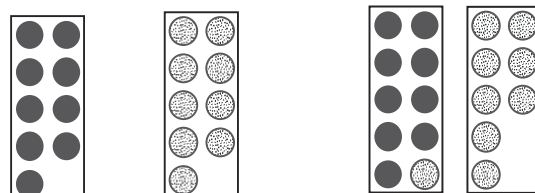
There are rabbits inside the cave.

Making a group of ten

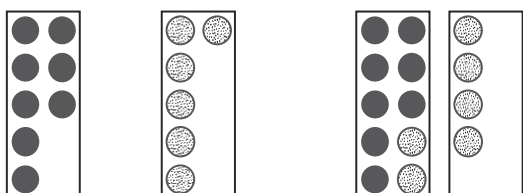
Add the following numbers:



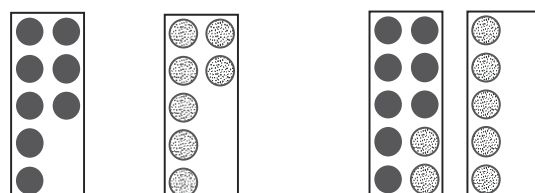
$$\boxed{7} + \boxed{5} = \boxed{12}$$



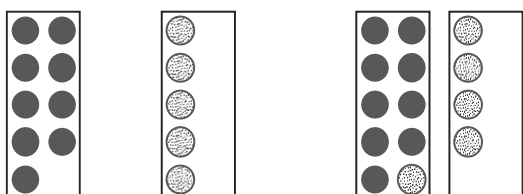
$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$



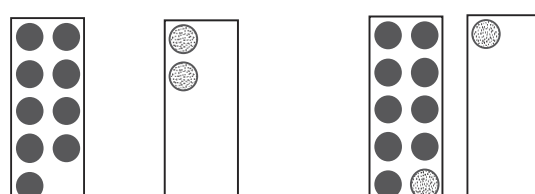
$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$



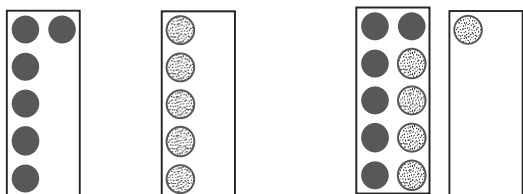
$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$



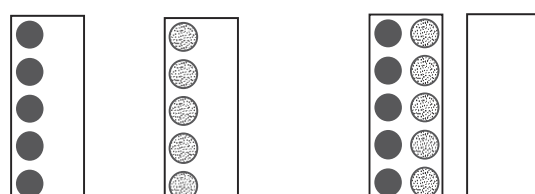
$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$



$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$

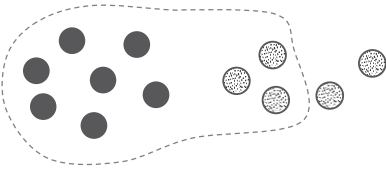


$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$

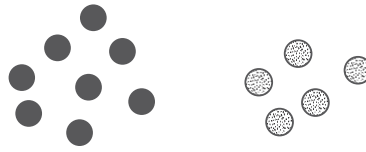


$$\boxed{} \bigcirc \boxed{} \bigcirc \boxed{}$$

Make a group of ten dots and write the answer:



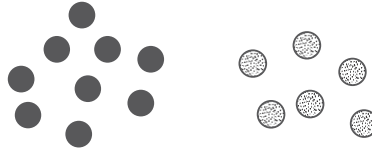
$$7 + 5 = 12$$



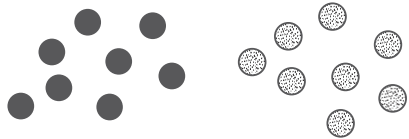
$$\dots + \dots = \dots$$



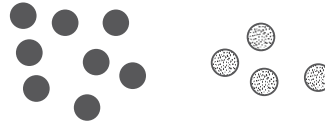
$$\dots + \dots = \dots$$



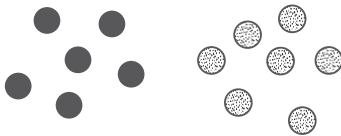
$$\dots + \dots = \dots$$



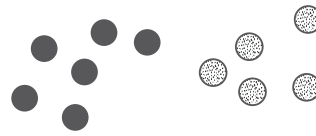
$$\dots + \dots = \dots$$



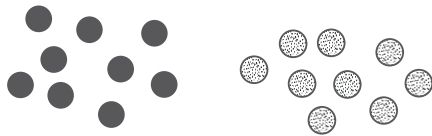
$$\dots + \dots = \dots$$



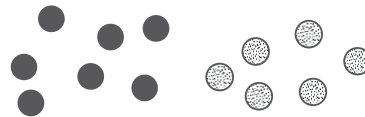
$$\dots + \dots = \dots$$



$$\dots + \dots = \dots$$



$$\dots + \dots = \dots$$

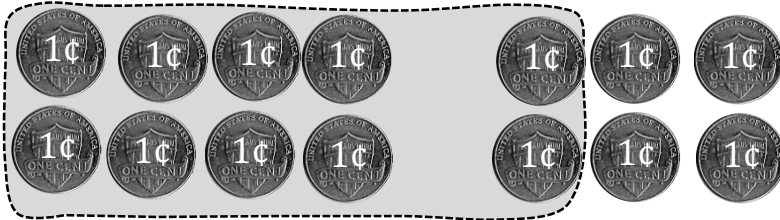


$$\dots + \dots = \dots$$

Money

To the Teacher: Please ask the student to outline a group of ten 1¢ coins before writing an answer.

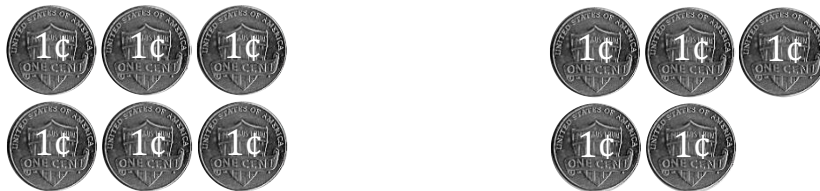
Add the two amounts and show a group of ten coins.



$$8 \text{ ¢} + 6 \text{ ¢} = \boxed{14} \text{ ¢}$$



$$\dots \text{ ¢} + \dots \text{ ¢} = \boxed{} \text{ ¢}$$



$$\dots \text{ ¢} + \dots \text{ ¢} = \boxed{} \text{ ¢}$$



$$\dots \text{ ¢} + \dots \text{ ¢} = \boxed{} \text{ ¢}$$

Sample page



... ¢

+



... ¢

=

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¢

Addition with money:

To the Teacher: Please perform following activities with the student.

[1] Create a bank with two denominations of money - 1¢ coins and 10¢ (Do not use coins of 5¢ or 25¢ denomination.)

[2] Perform the following operation of addition of 8¢ and 4¢ with the following steps:

Step 1: Give student two separate groups of 8¢ and 4¢ in the form of 1¢ coins.

Step 2: Ask him/her to write an addition equation to compute the total amount.

Step 3: Let him/her mix the two groups of coins.

Step 4: Ask “Can you exchange for a coin of 10¢?”. If the answer is yes, then ask to take ten coins of 1¢ to the bank and exchange them for one coin of 10¢. (After the exchange, student will have three coins – one of 10¢ and two of 1¢).

Step 5: Ask to count the total amount (“10 ... 11 ... 12 cents”)

[3] Repeat the above procedure for adding the following amounts:

(i) 9¢ and 2¢

(ii) 9¢ and 6¢

(iii) 6¢ and 3¢

(iv) 6¢ and 4¢

(v) 6¢ and 5¢

(vi) 8¢ and 1¢

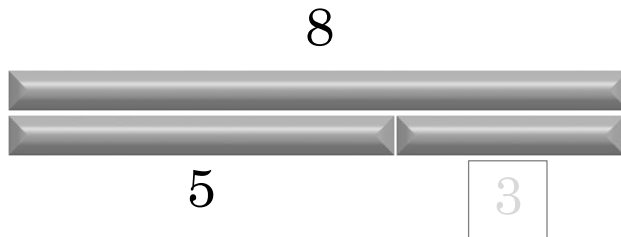
(vii) 8¢ and 2¢

(viii) 8¢ and 7¢

(ix) 9¢ and 9¢

Addition-Subtraction link

Write addition and subtraction equations for the given diagrams:

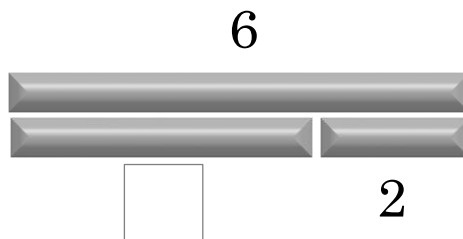


$$5 + 3 = 8$$

$$3 + 5 = 8$$

$$8 - 5 = 3$$

$$8 - 3 = 5$$

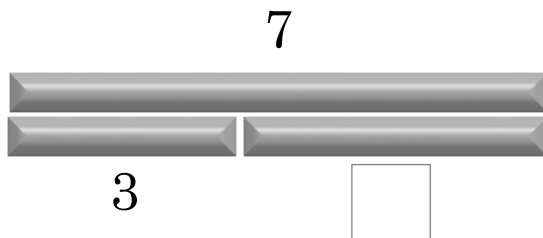


$$\square + \square = \square$$

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

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

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



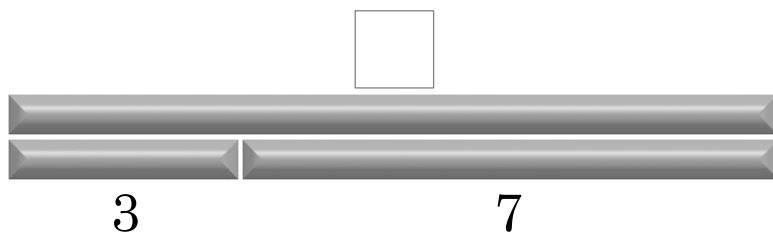
$$\square + \square = \square$$

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

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

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

Sample page

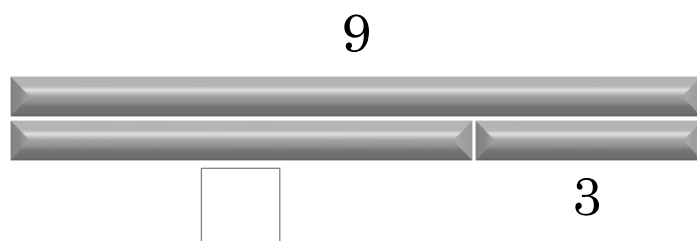


$$\square + \square = \square$$

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

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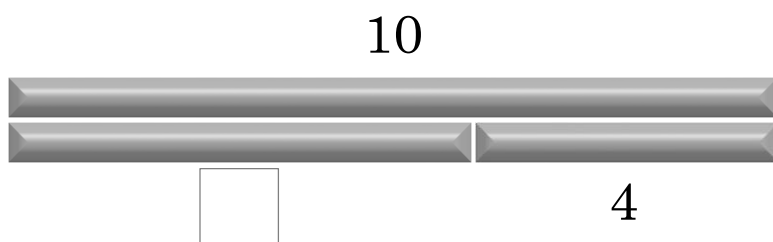


$$\square + \square = \square$$

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

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

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



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

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

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

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Word Problems

Solve the following problems.

To the Teacher: Please highlight the differences between addition and subtraction problems.

First grade classroom has five boys and three girls.



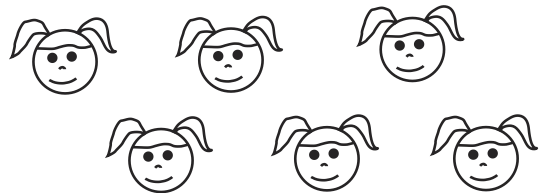
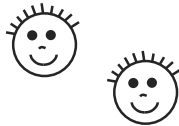
How many students are in the classroom in all?

$$\boxed{5} \bigcirc \boxed{3} = \boxed{}$$

The classroom has students in all.

There are eight students in the class.

Two students are boys.



How many students are girls?

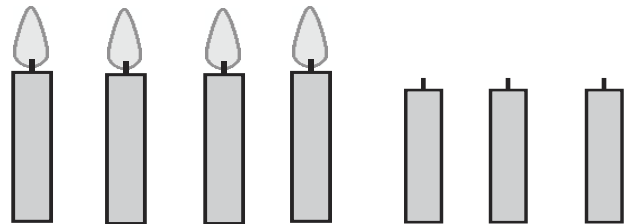
$$\boxed{8} \bigcirc \boxed{2} = \boxed{}$$

..... students are girls.

Four candles are burning.

Three candles are not burning.

How many candles are there altogether?

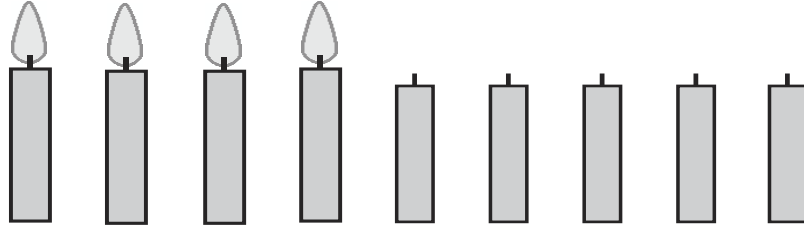


$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

There are candles altogether.

There are nine candles altogether.
Four candles are burning.

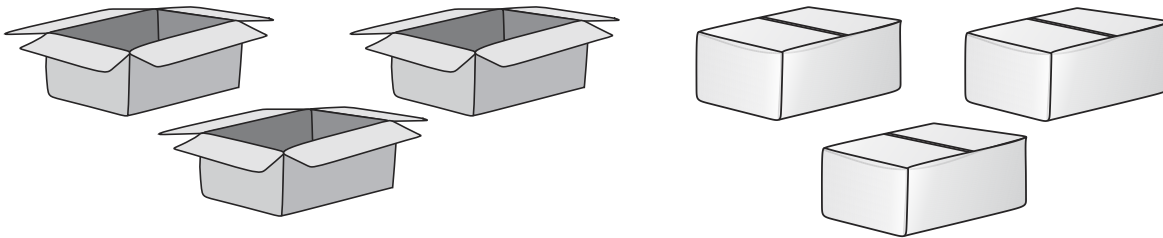
How many candles
are not burning?



$$\boxed{9} \bigcirc \boxed{} = \boxed{}$$

..... candles are not burning.

A bookstore has three open boxes and three closed boxes.

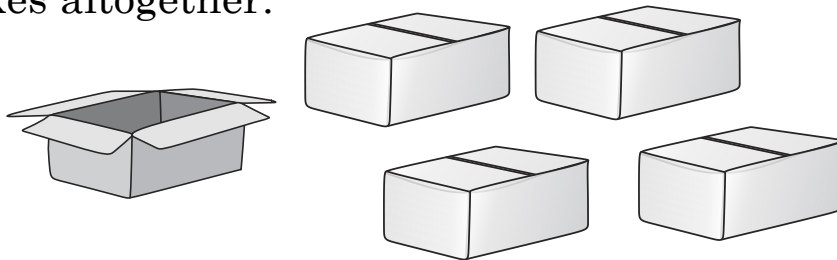


How many boxes are there altogether?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

There are boxes altogether.

There are five boxes altogether.
One box is open.



How many boxes are closed?

$$\boxed{5} \bigcirc \boxed{} = \boxed{}$$

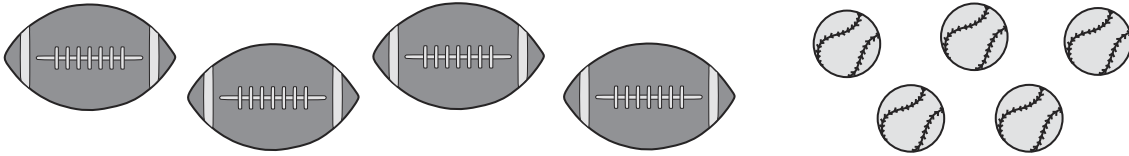
..... boxes are closed.

Word Problems

Solve the following problems.

To the Teacher: Please highlight the differences between addition and subtraction problems.

A classroom cabinet has four footballs and five baseballs.

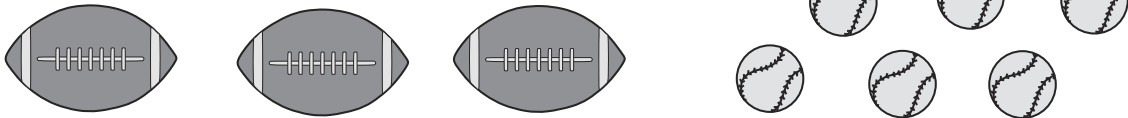


How many balls are there altogether?

$$\boxed{4} \bigcirc \boxed{5} = \boxed{}$$

There are balls altogether.

There are nine balls altogether; three of them are footballs and the rest are baseballs.

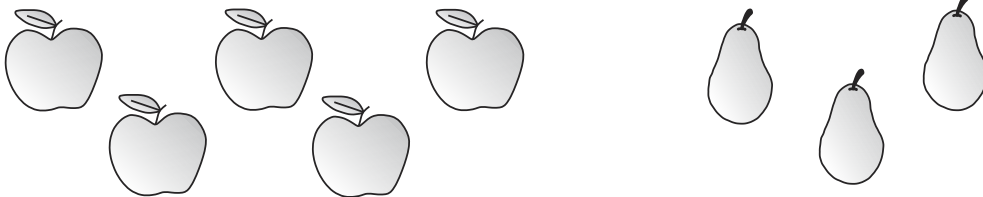


How many balls are baseballs?

$$\boxed{9} \bigcirc \boxed{3} = \boxed{}$$

There are baseballs.

A fruit basket has five apples and three pears.



How many fruits are in the basket altogether?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

The basket has fruits altogether.

A fruit basket has eight fruits; two of them are apples; and the rest are pears.

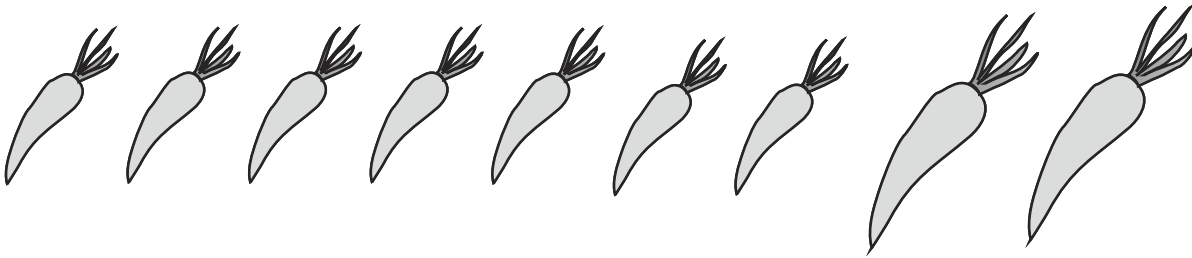


How many pears does the basket have?

$$\boxed{8} \bigcirc \boxed{} = \boxed{}$$

The basket has pears.

The basket has seven small carrots and two big carrots.

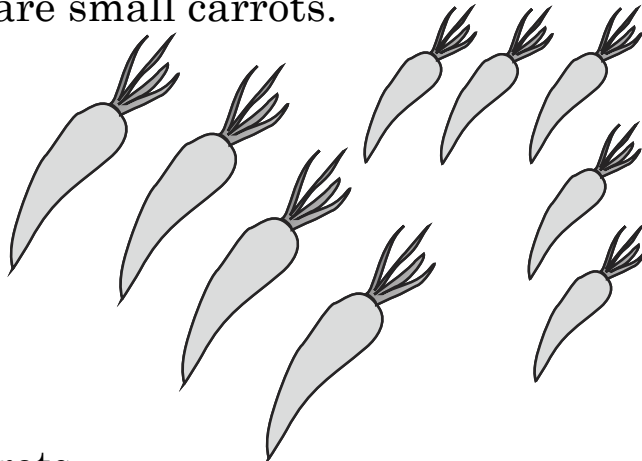


How many carrots does the basket have altogether?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

The basket has carrots altogether.

The basket has nine carrots altogether; four of them are big carrots; and the rest of them are small carrots.



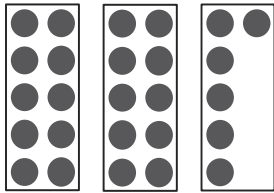
How many small carrots does the basket have?

$$\boxed{9} \bigcirc \boxed{} = \boxed{}$$

The basket has small carrots.

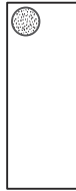
Addition with coins

Add 1 or 10 for the following numbers.



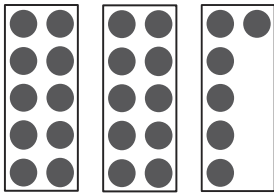
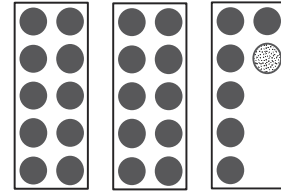
26

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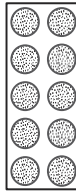
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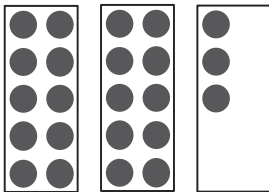
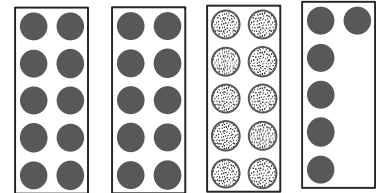
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10

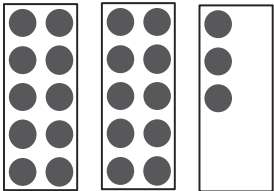
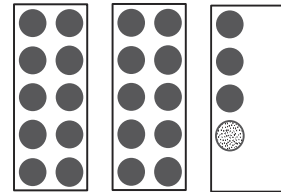
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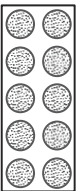
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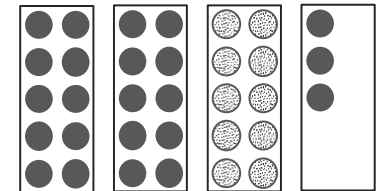
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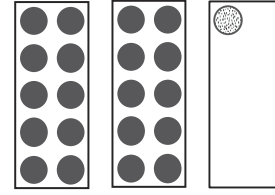
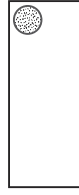
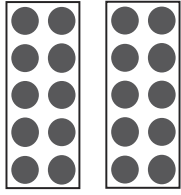
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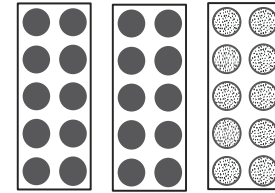
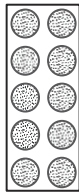
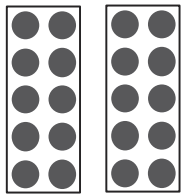
Sample page



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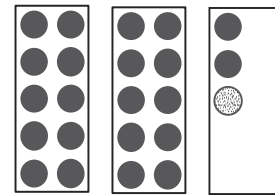
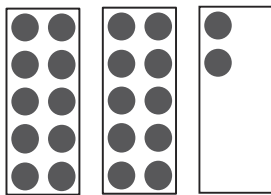
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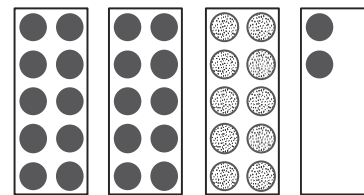
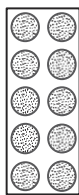
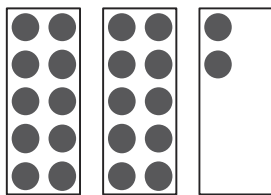
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Word Problems

Solve the following problems.

To the Teacher: Please highlight the differences between addition and subtraction problems.

Tom has 5¢.
Amy has 3¢



How much money do they have altogether?

$$\boxed{5} \bigcirc \boxed{3} = \boxed{}$$

They have ¢ altogether.

Ben and John have 8¢ altogether.
Ben has 2¢.

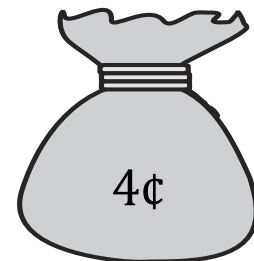
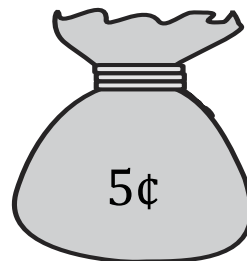


How much money does John have?

$$\boxed{8} \bigcirc \boxed{2} = \boxed{}$$

John has ¢.

The first bag has 5¢.
The second bag has 4¢.

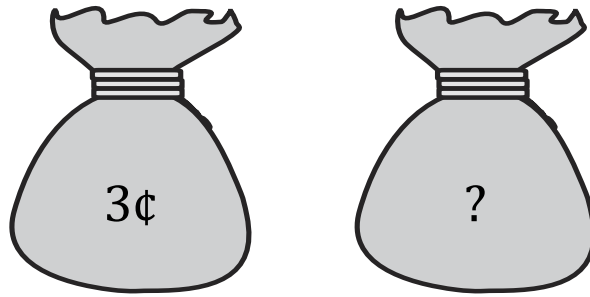


How much money do both bags have in all?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

Both bags have ¢ in all.

Two bags have 10¢ altogether.
The first bag has 3¢.



How much money does the second bag have?

$$\square \bigcirc \square = \square$$

The second bag has ¢.

Mark has 4¢.
Matt has 3¢.

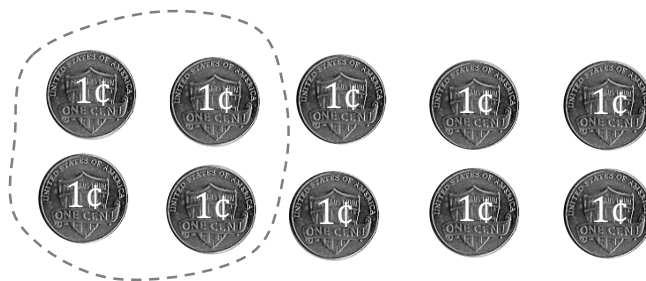


How much money do they have altogether?

$$\square \bigcirc \square = \square$$

They have ¢ altogether.

Steve and Larry have 10¢ altogether.
Steve has 4¢.



How much money does Larry have?

$$\square \bigcirc \square = \square$$

Larry has ¢.

Word Problems

Solve the following problems.

To the Teacher: Please highlight the differences between addition and subtraction problems.

John has 5¢.
His mom gave him 3¢.

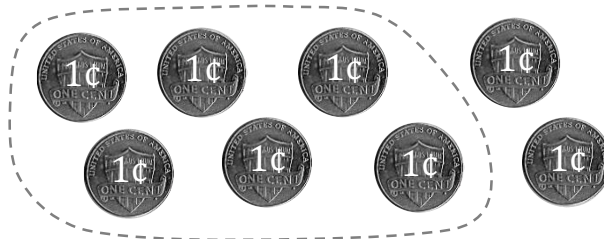


How much money does he have now?

$$\boxed{5} \bigcirc \boxed{3} = \boxed{}$$

He has ¢ now.

Steve has 8¢.
He bought candy for 6¢.



How much money does he have left?

$$\boxed{8} \bigcirc \boxed{6} = \boxed{}$$

He has ¢ left.

Ben had 5¢.
His mom gave him 4¢.

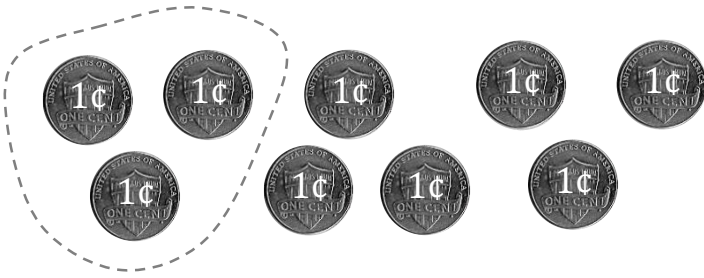


How much money does he have now?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

He has ¢ now.

Amy had 9¢.
She gave 3¢ to her friend.



How much money does she have left?

$$\boxed{9} \bigcirc \boxed{} = \boxed{}$$

She has ¢ left.

Maria had 8¢.
Her mom gave her 2¢.

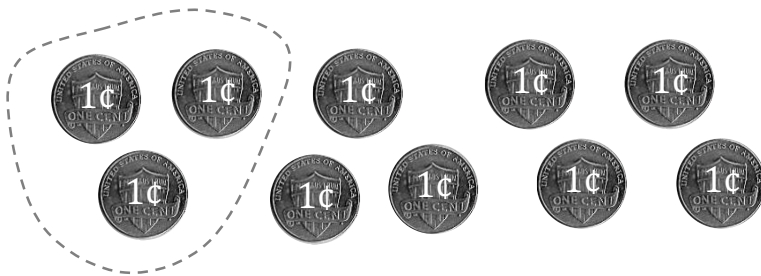


How much money does she have now?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

She has ¢ now.

Mark had 10¢.
He spent 3¢.



How much money does he have left?

$$\boxed{10} \bigcirc \boxed{} = \boxed{}$$

He has ¢ left.

Word Problems

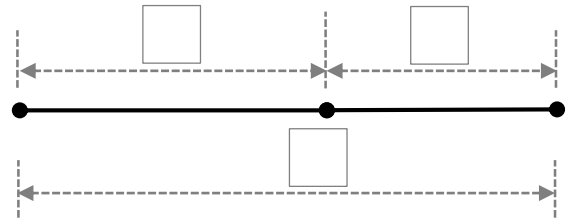
Solve the following problems.

To the Teacher: Please highlight the differences between addition and subtraction problems.

Jim has three units long string.
Ben has two units long string.

How much string do they have altogether?

$$\boxed{3} \bigcirc \boxed{2} = \boxed{}$$

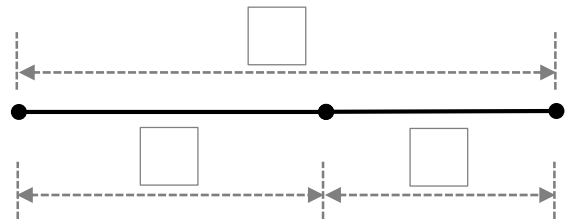


They have units long string altogether.

Kelly and John have five units long string altogether. Kelly has three units long string.

How much string does John have?

$$\boxed{5} \bigcirc \boxed{3} = \boxed{}$$

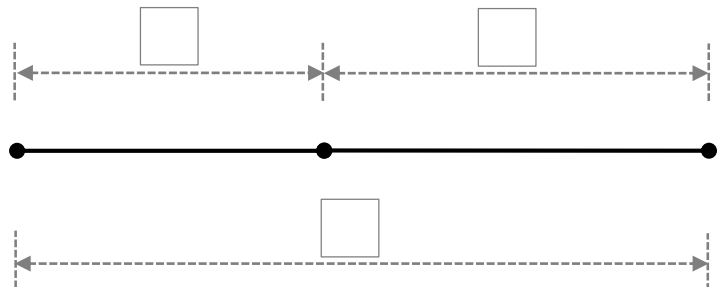


John has units long string.

Jeff has four units long stick candy.
Steve has five units long stick candy.

How much stick candy do they have altogether?

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

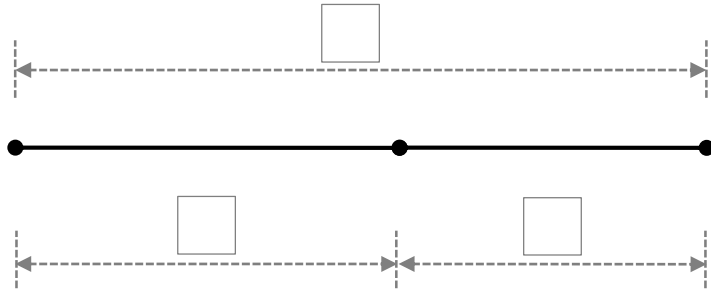


They have units long stick candy altogether.

Amy and Lisa have nine units long stick candy altogether.
Amy has five units long stick candy.

How much candy does
Lisa have?

$$\square \bigcirc \square = \square$$

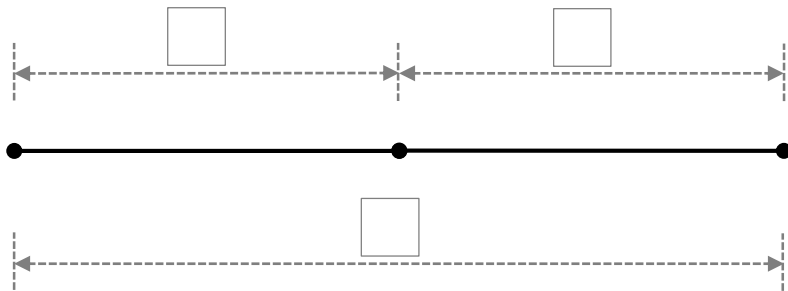


Lisa has units long stick candy.

Matt has five units long string.
John has five units long string.

How much string do
they have altogether?

$$\square \bigcirc \square = \square$$

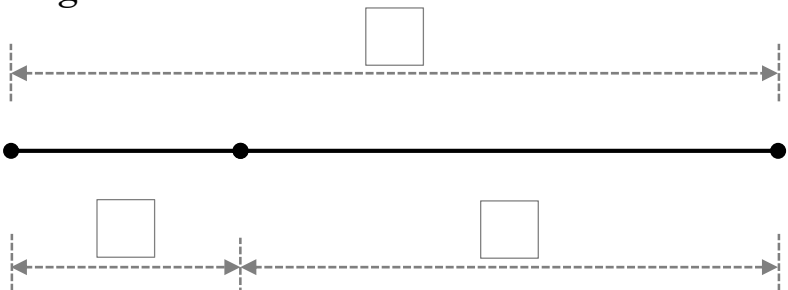


They have units long string altogether.

Tyler and Steve have ten units long string altogether. Tyler
has three units long string

How much string
does Steve have?

$$\square \bigcirc \square = \square$$



Steve has units long string.

Numbers 0-100

To the Teacher:

While counting, please ask the student to count **aloud** in the groups of 10s, such as 10...20... 30 ... 40 ... 50 ... 53.

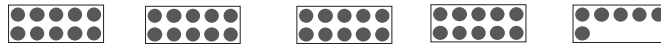
Fill numbers in the blanks:











Write the amount of money for each group:

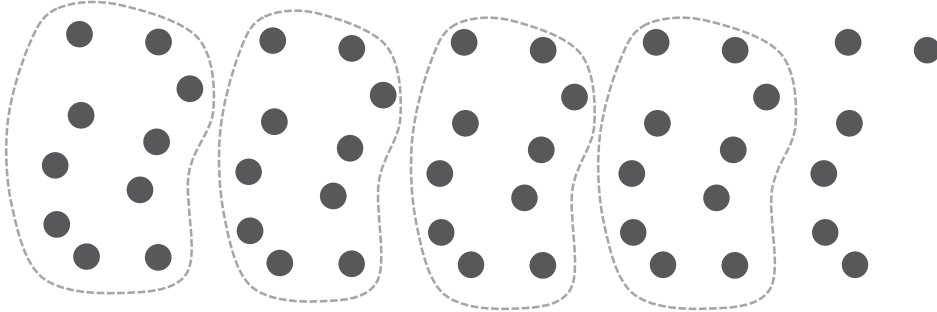

 ¢

 ¢

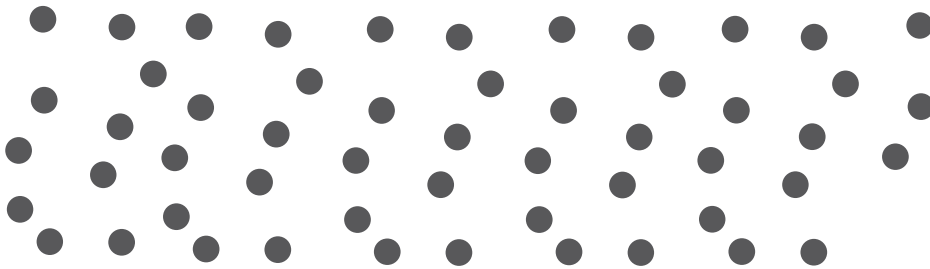
How many dots? Circle the groups of ten dots and count them in the steps of ten.

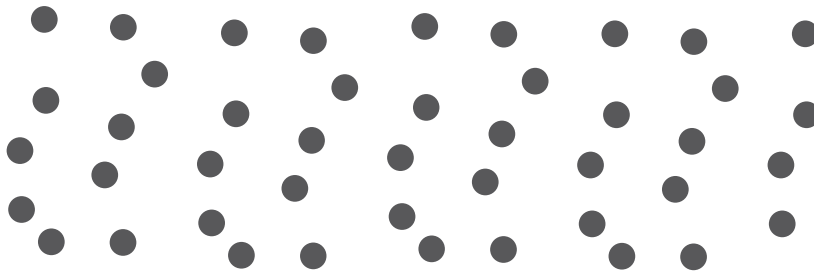
To the Teacher: (1) Please ask to create as many groups of 10s as possible.

(2) Then count in the groups of 10s. For example, 10...20...30 ... 40 ... 41... 42... 43 ... 44 ... 45 ... 46



46





Counting money:

To the Teacher: Please set up a bank with the separate groups of coins of 10¢ and 1¢.

Activity I: Steps for a sample problem are as follows:

1. Give student 34 coins of 1¢ each.
2. Ask to make as many groups of ten coins as possible.
3. Ask to exchange each group of ten coins of 1¢ for one coin of 10¢.
4. Ask to count aloud in groups of tens ("10 ... 20 ... 30 ... 31 ... 32 ... 33 ... 34 cents")

Repeat the above steps for the following amounts: (1) 44 coins of 1¢ each. (2) 53 coins of 1¢ each. (3) 61 coins of 1¢ each.

Activity II: Ask the student to bring a certain amount from the bank. Ask to pick as many as 10¢ coins as possible before picking 1¢ coins while counting loudly along the process.

For example, when asked to pick 53¢, a student should first pick five coins of 10¢ each; then proceed to pick three coins of 1¢ while loudly counting "10 ... 20 ... 30 ... 40 ... 50 ... 51 ... 52 ... 53 cents"

Repeat the above procedure for the following amounts: (1) 40¢ (2) 42¢ (3) 44¢ (4) 70¢ (5) 71¢ (6) 83¢ (7) 92¢

Number Composition

Decompose the numbers in 10s and 1s:

<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">4 3</div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">↓</div> <div style="text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px;">4 0</div> <div style="border: 1px solid black; padding: 5px;">3</div> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">6 7</div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">↓</div> <div style="text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px;"></div> <div style="border: 1px solid black; padding: 5px;"></div> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">7 6</div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">↓</div> <div style="text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px;"></div> <div style="border: 1px solid black; padding: 5px;"></div> </div>
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">8 3</div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">↓</div> <div style="text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px;"></div> <div style="border: 1px solid black; padding: 5px;"></div> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">3 8</div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">↓</div> <div style="text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px;"></div> <div style="border: 1px solid black; padding: 5px;"></div> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">9 6</div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">↓</div> <div style="text-align: center;">↓</div> </div> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px;"></div> <div style="border: 1px solid black; padding: 5px;"></div> </div>

Compose numbers by adding tens and ones:

$80 + 7 = 87$	$70 + 3 =$	$50 + 7 =$
$30 + 5 =$	$70 + 6 =$	$90 + 4 =$
$60 + 8 =$	$80 + 8 =$	$50 + 5 =$
$90 + 2 =$	$60 + 5 =$	$70 + 7 =$

Decompose the numbers into tens and ones:

$57 = 50 + 7$	$87 = \dots + \dots$	$67 = \dots + \dots$
$44 = \dots + \dots$	$84 = \dots + \dots$	$64 = \dots + \dots$
$96 = \dots + \dots$	$66 = \dots + \dots$	$86 = \dots + \dots$
$72 = \dots + \dots$	$52 = \dots + \dots$	$62 = \dots + \dots$
$55 = \dots + \dots$	$75 = \dots + \dots$	$95 = \dots + \dots$
$38 = \dots + \dots$	$88 = \dots + \dots$	$68 = \dots + \dots$
$59 = \dots + \dots$	$79 = \dots + \dots$	$99 = \dots + \dots$
$33 = \dots + \dots$	$83 = \dots + \dots$	$63 = \dots + \dots$
$34 = \dots + \dots$	$84 = \dots + \dots$	$54 = \dots + \dots$
$41 = \dots + \dots$	$71 = \dots + \dots$	$91 = \dots + \dots$
$95 = \dots + \dots$	$85 = \dots + \dots$	$55 = \dots + \dots$

Subtraction 0-20

Fill in the blanks in subtraction equations and show the subtraction with ten frames:

$$\boxed{14} - \boxed{8} = \boxed{6}$$

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

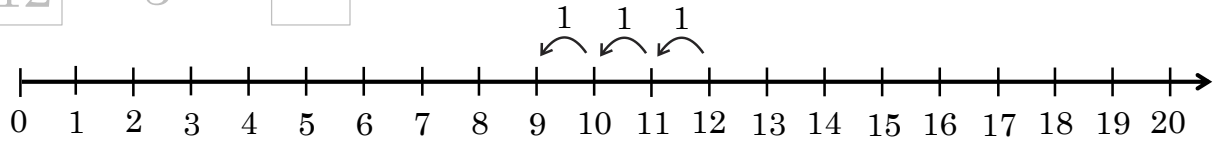
$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

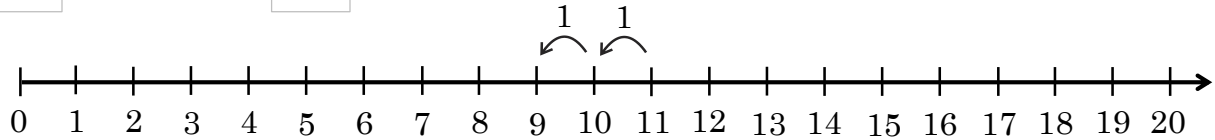
$$\boxed{} \bigcirc \boxed{} = \boxed{}$$

Write subtraction equation for backward hops:

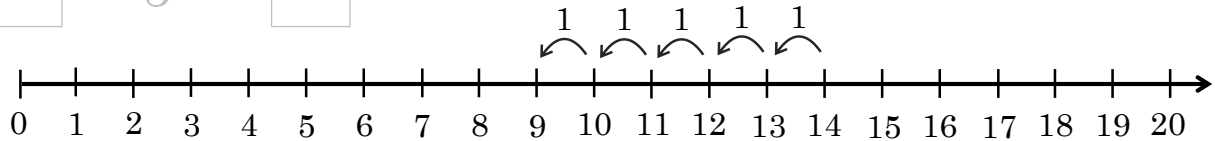
$$\boxed{12} - 3 = \boxed{}$$



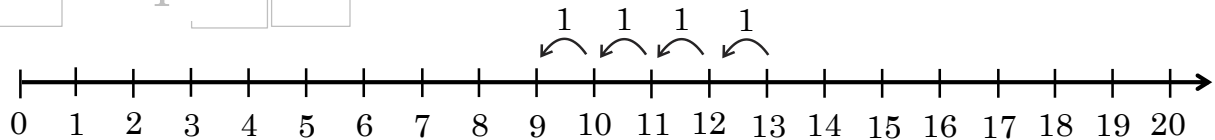
$$\boxed{} - 2 = \boxed{}$$



$$\boxed{} - 5 = \boxed{}$$



$$\boxed{} - 4 = \boxed{}$$

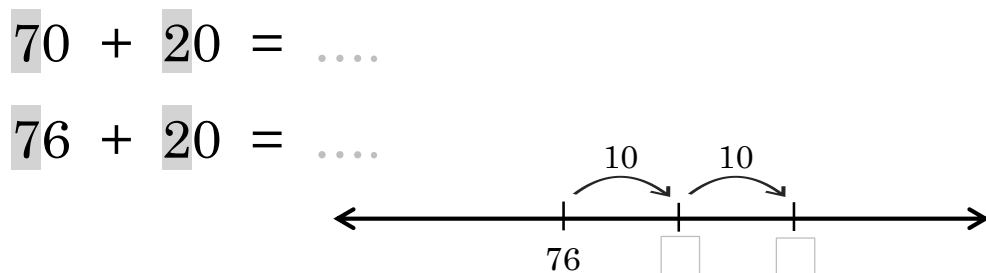
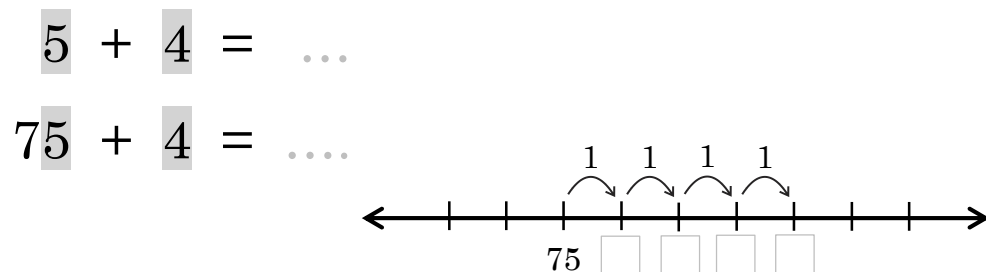
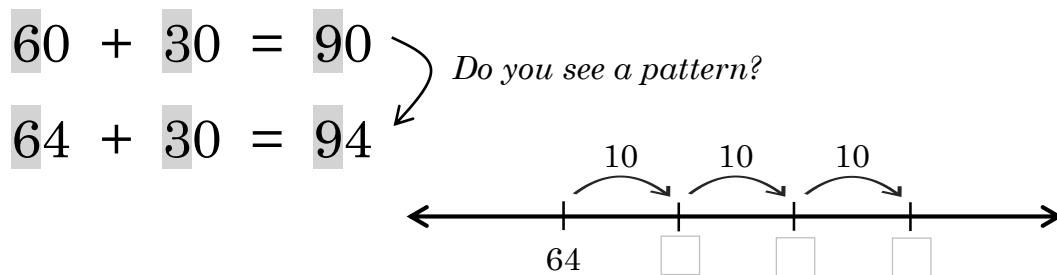
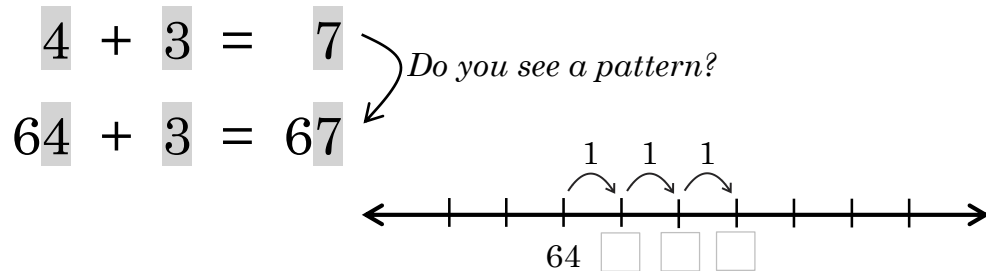


Perform the following subtractions:

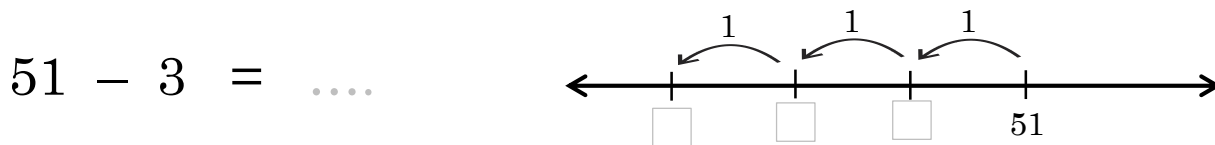
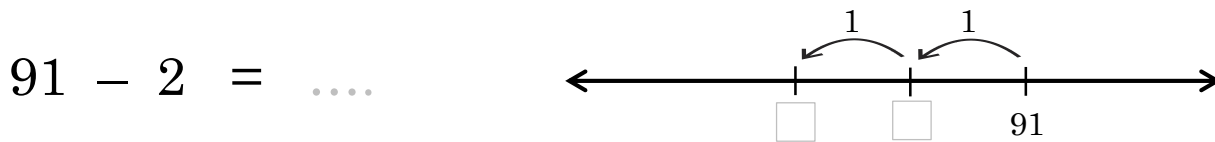
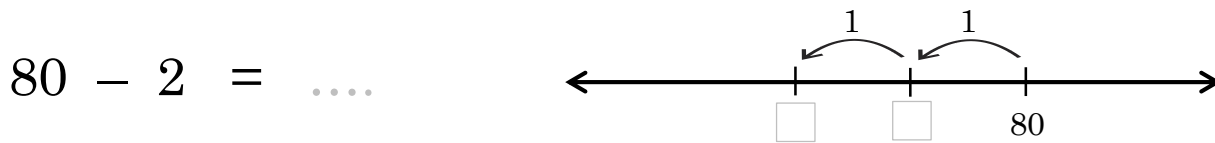
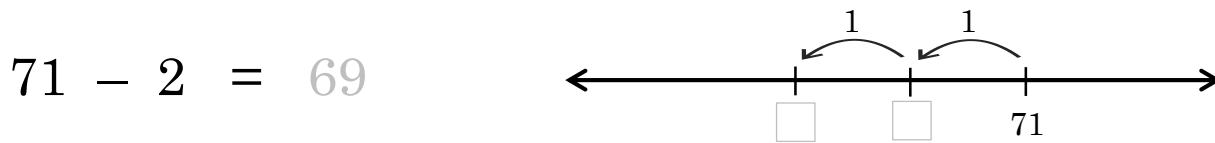
$11 - 2 =$	$12 - 3 =$	$11 - 3 =$
$13 - 4 =$	$11 - 4 =$	$13 - 5 =$
$14 - 4 =$	$12 - 4 =$	$15 - 5 =$
$11 - 5 =$	$12 - 5 =$	$14 - 5 =$

Place values in operations

Show the following additions with a number line:



Show the following subtractions on a number line:



Perform the following additions:

$53 + 20 =$	$48 + 30 =$	$55 + 30 =$
$66 + 30 =$	$74 + 20 =$	$66 + 20 =$

Perform the subtractions by counting backwards:

$50 - 2 =$	$60 - 2 =$	$80 - 2 =$
$71 - 2 =$	$91 - 2 =$	$51 - 2 =$

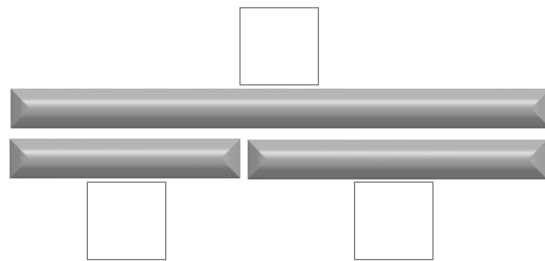
Addition equations

Meaning of the equal symbol: Both sides of the equal symbol have same values. For example,

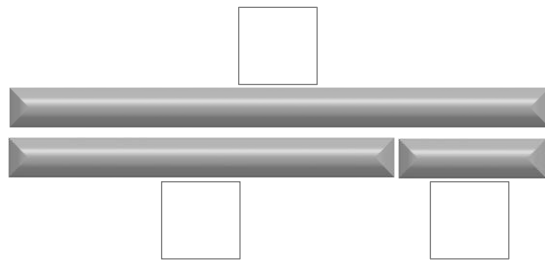
$$5 + 3 = 8 \quad \text{can also be written as} \quad 8 = 5 + 3$$

Fill the addition equations and unknown lengths.

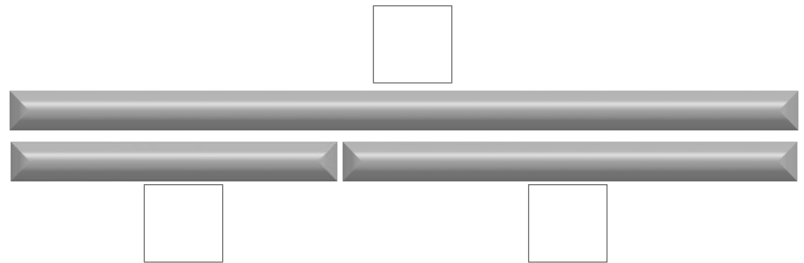
$$3 + 4 = \boxed{7}$$



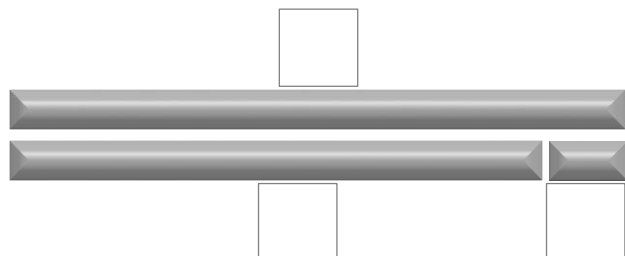
$$\boxed{} = 5 + 2$$



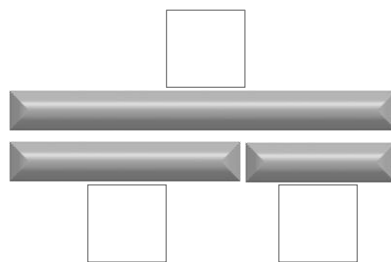
$$4 + 5 = \boxed{}$$



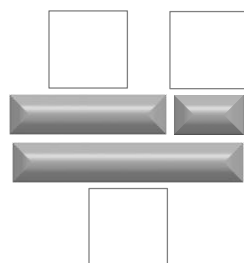
$$\boxed{} = 7 + 1$$



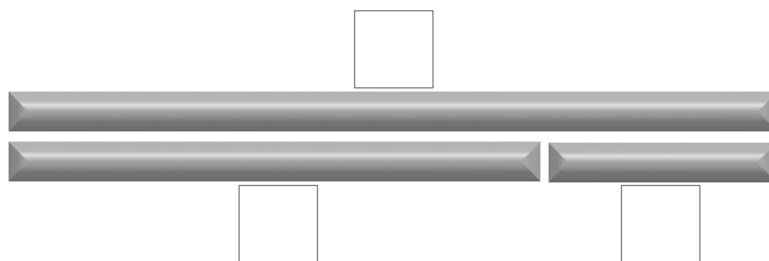
$$3 + 2 = \square$$



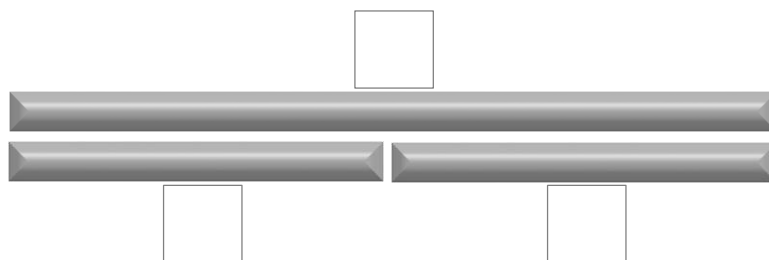
$$\square = 2 + 1$$



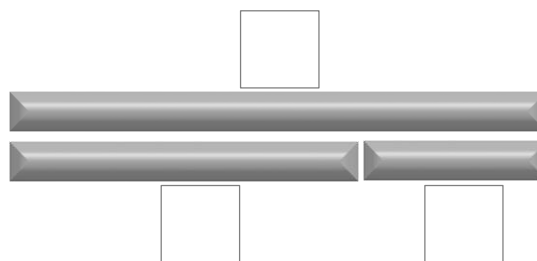
$$7 + 3 = \square$$



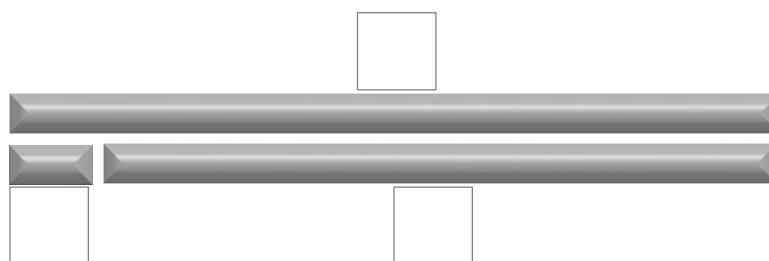
$$\square = 5 + 5$$



$$6 + 3 = \square$$

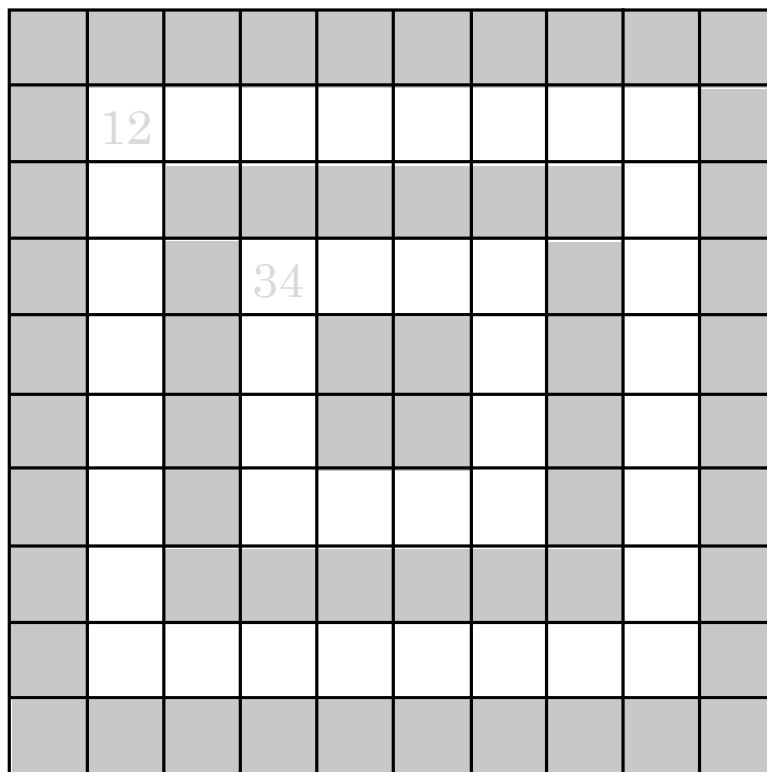
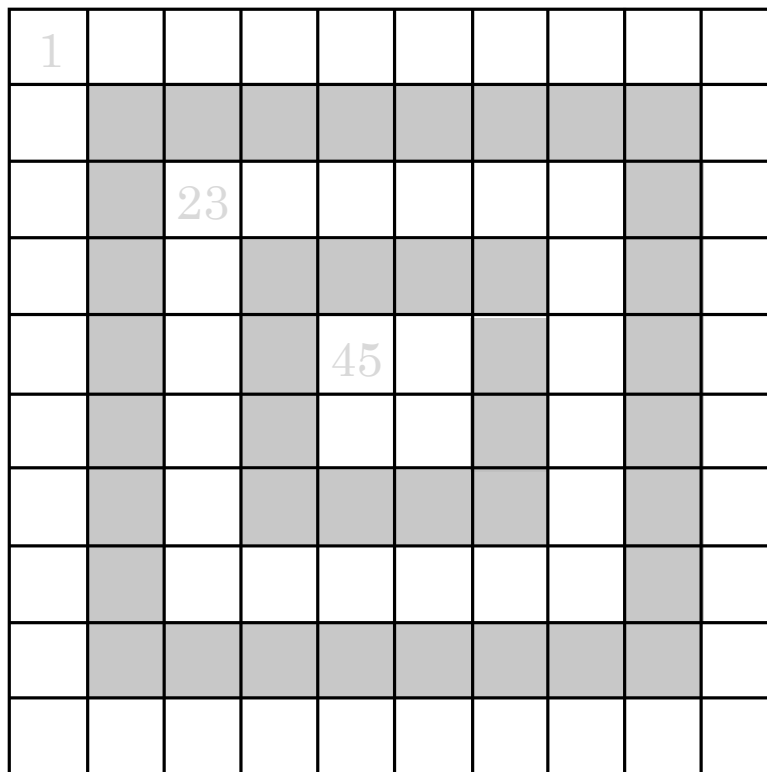


$$\square = 1 + 9$$



Hundreds Chart

Fill the numbers in blank spaces only:



Fill the numbers in blank spaces only:

	12								

		23							