MATH

5-6-7 YEARS OLD

390 EXERCISES

MATH WORLD CLUB

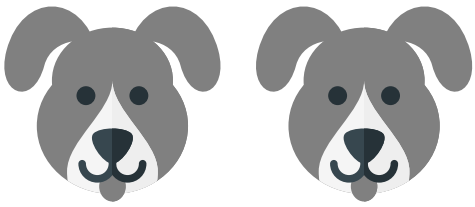
Contact: sofian@mathworldclub.com

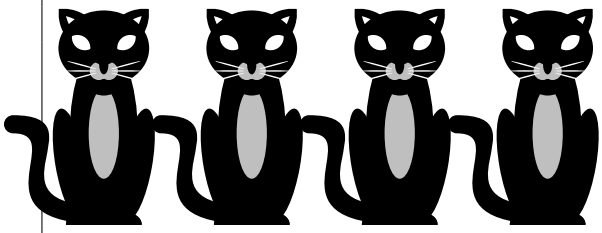
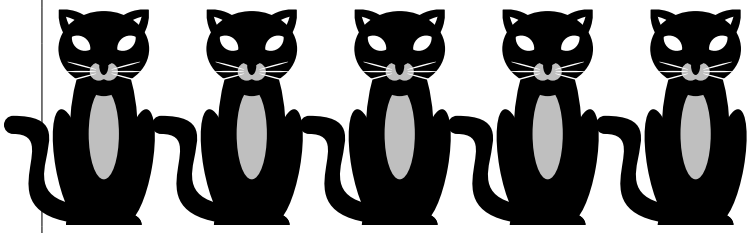
Contents

Chapter 1

Up to five

1.1 Numbers counted up to five

	1	one dog
	2	two dogs
	3	three dogs

	4	four cats
	5	five cats

Exercise 1. *Trace the number using a pencil or pen.*

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5

Exercise 2. *Choose the name to number.*

0
1
2
3
4
5

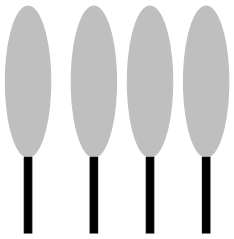
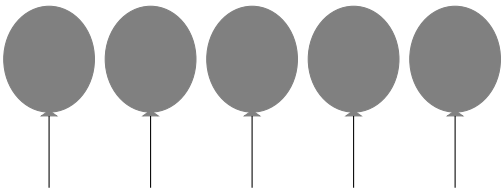
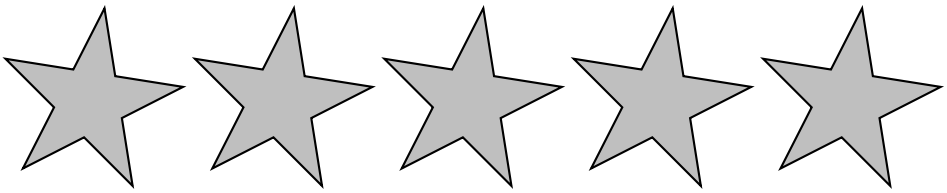
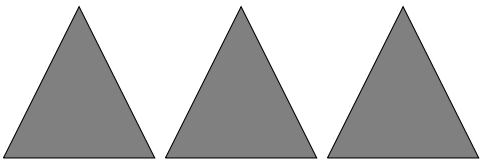
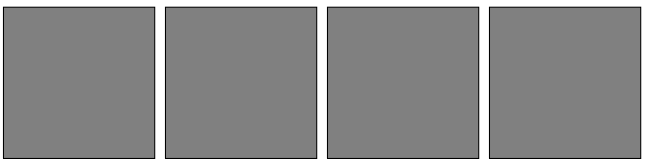
two
four
three
five
zero
one

Exercise 3. *Complete the tables.*

	0	zero
•		one
••	2	
•••		three
••••		four
•••••		five

♡ ♡ ♡ ♡ ♡	5	
♡ ♡ ♡ ♡	4	
♡ ♡ ♡	3	
♡ ♡		two
♡	1	

Exercise 4. *How many things are there?*

	4
	
	
	
	
	
	

1.2 Number after before and between.

The number comes between 1 and 3 is 2.

The number comes after 2 is 3.

The number comes before 3 is 2.

Exercise 5.

Which number comes between 3 and 5 ?	
Which number comes after 2 ?	
Which number comes after 3 ?	
Which number comes between 2 and 4 ?	
Which number comes before 4 ?	
Which number comes between 1 and 3 ?	
Which number comes before 5 ?	
Which number comes after 4 ?	
Which number comes before 1 ?	

Exercise 6. *Write the number comes after.*

1	2	

2	3	

3	4	

Exercise 7. *Write the number comes before*

	2	3

	3	4

	4	5

Exercise 8. *Write the number comes between.*

1		3

3		5

2		4

Exercise 9. *Write the missing number.*

1	2	3	4	

1	2	3		5

1	2		4	5

1		3	4	5

	2	3	4	

1		3		5

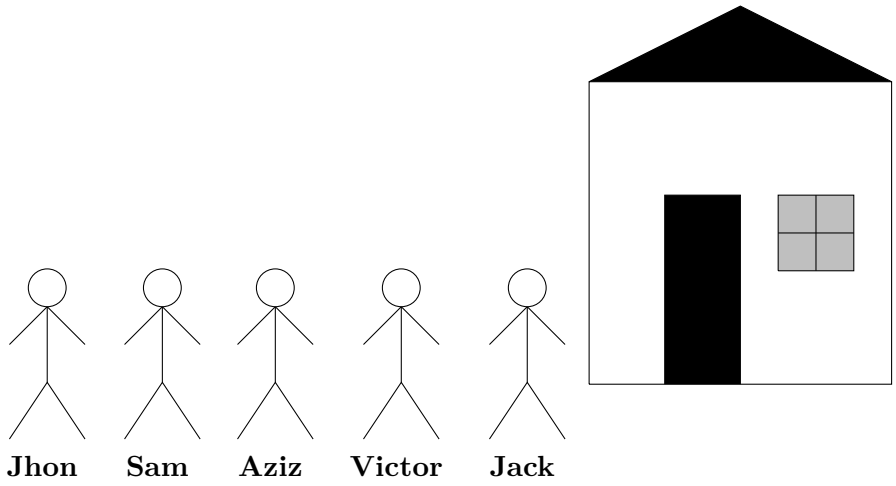
	2		4	

		3		5

1			4	

1				5

1.3 Ordinal : first, seconde, third, fourth and fifth.

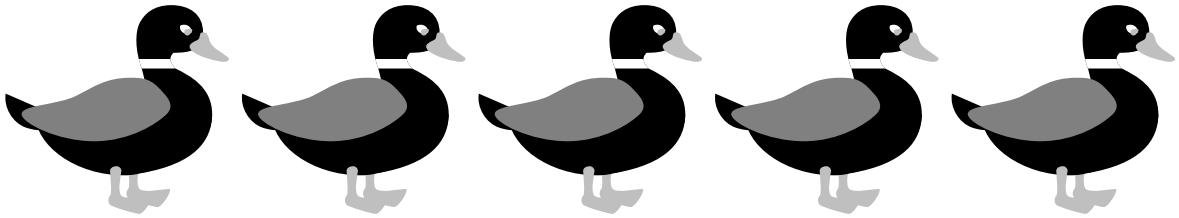


- Jack arrive at home first.
- Victor arrive at home second.
- Aziz arrive at home third.
- Sam arrive at home fourth.
- Jhon arrive at home fifth.

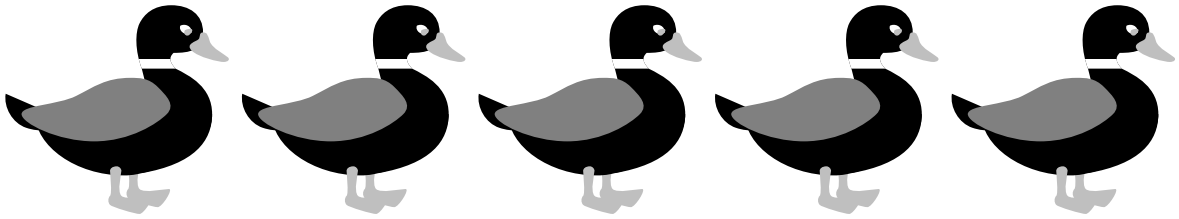
Cardinal	
1	one
2	two
3	three
4	four
5	five

Ordinal	
1st	first
2nd	second
3rd	third
4th	fourth
5th	fifth

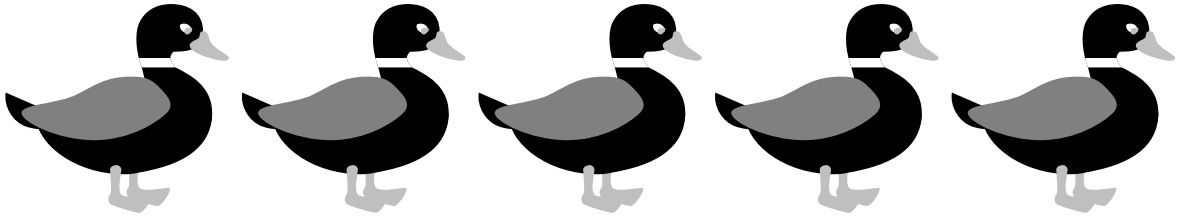
Exercise 10. *Circle the first duck.*



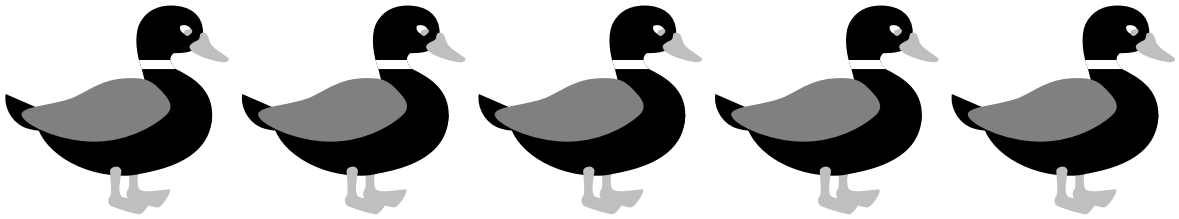
Exercise 11. *Circle the third duck.*



Exercise 12. *Circle the fourth duck.*



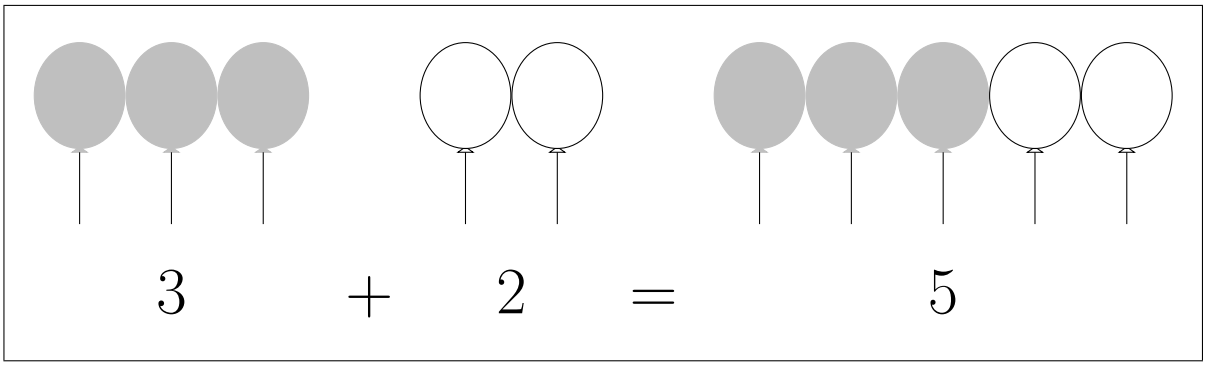
Exercise 13. *Circle the second duck.*



1.4 Addition

- I buy 3 gray balloons and 2 white balloons.

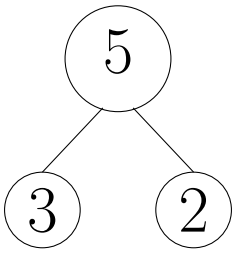
How many balloons I have?



I have 5 balloons.

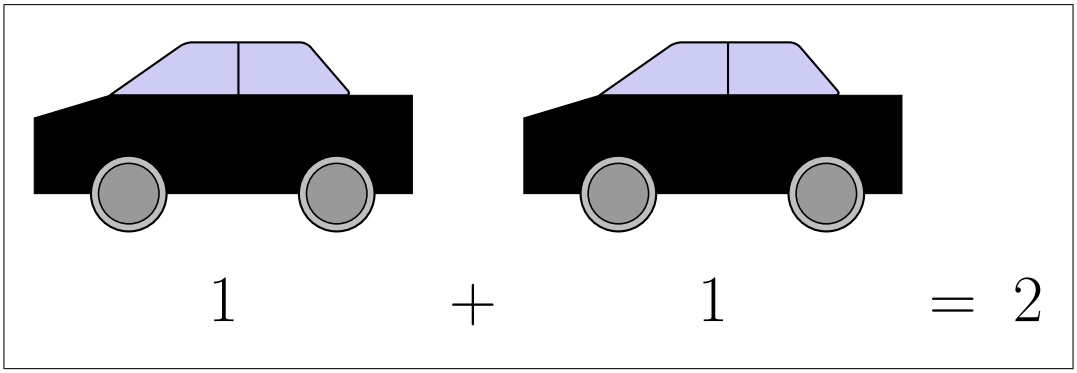
$$\text{So } 3 + 2 = 5$$

The number bond:



- My modher have one car and my fadher have one car.

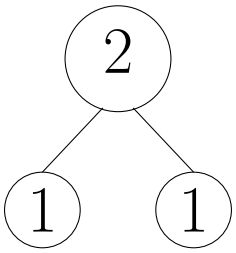
How many cars we have ?



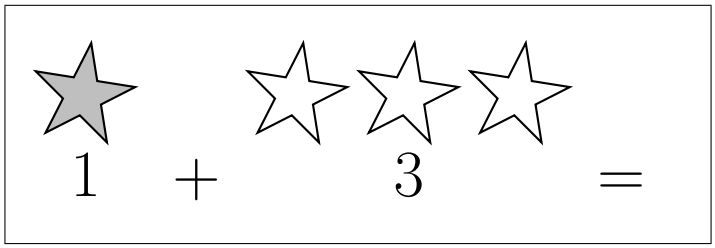
We have two cars.

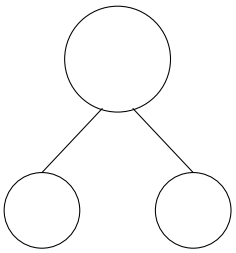
$$\text{So } 1 + 1 = 2$$

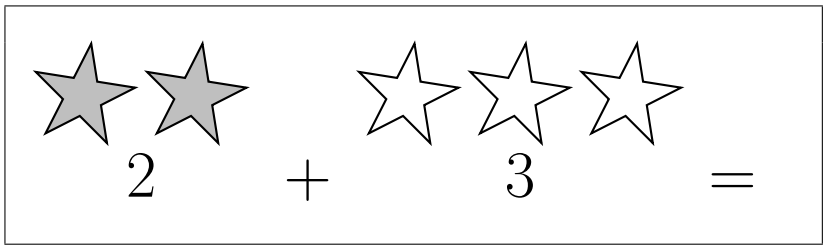
The number bond:

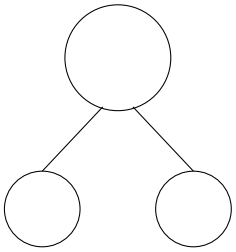


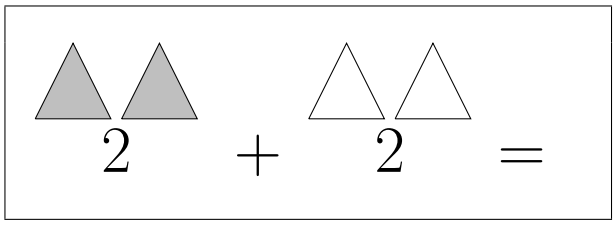
Exercise 14. *Sum up and complete the number bond.*

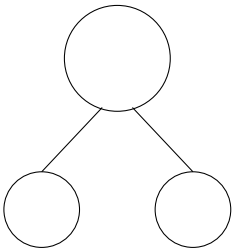


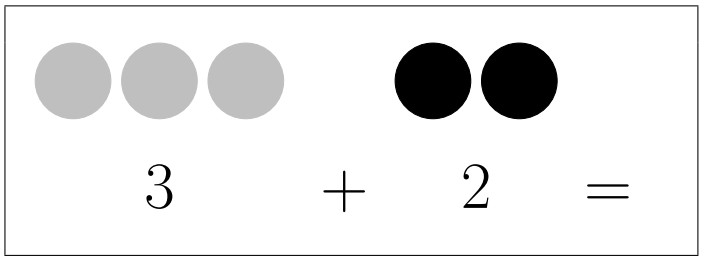


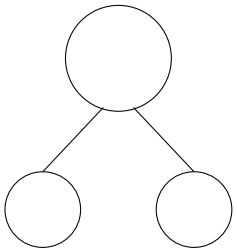




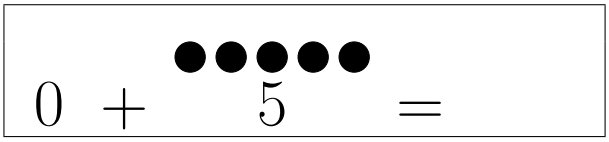


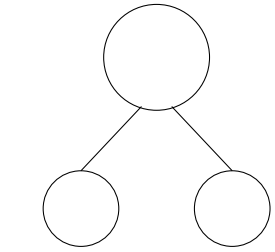


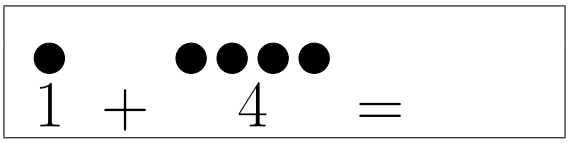


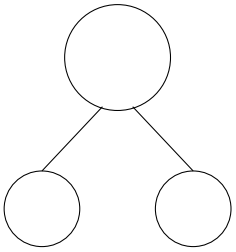


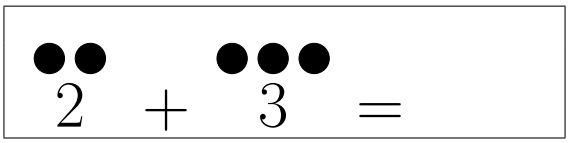
Exercise 15. *Sum up and complete the number bond.*

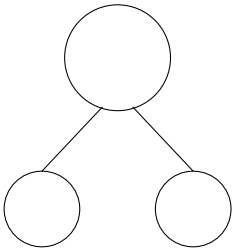


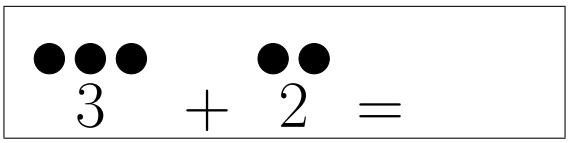


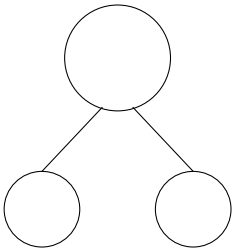


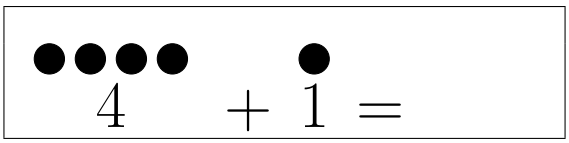


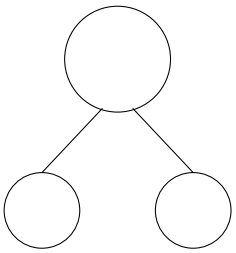




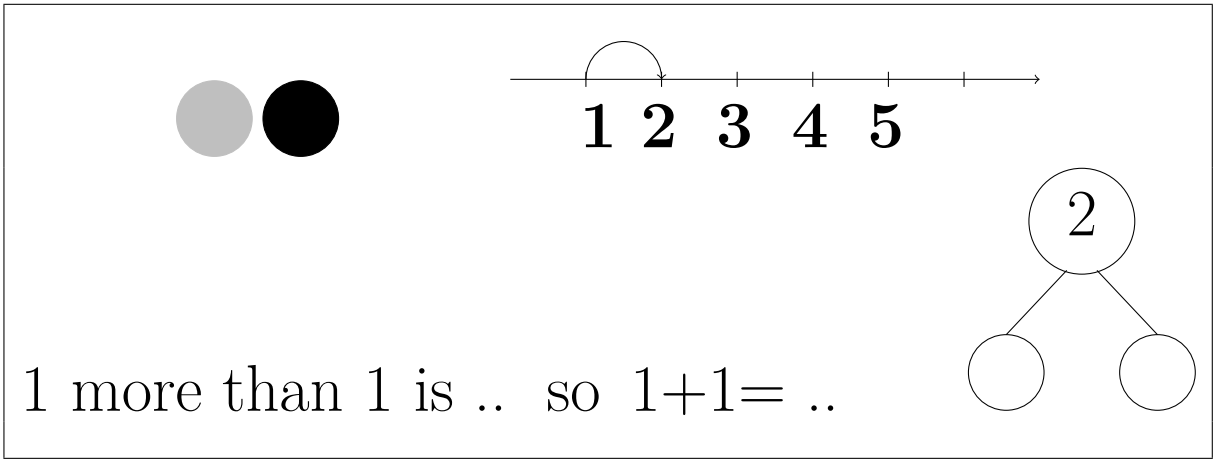


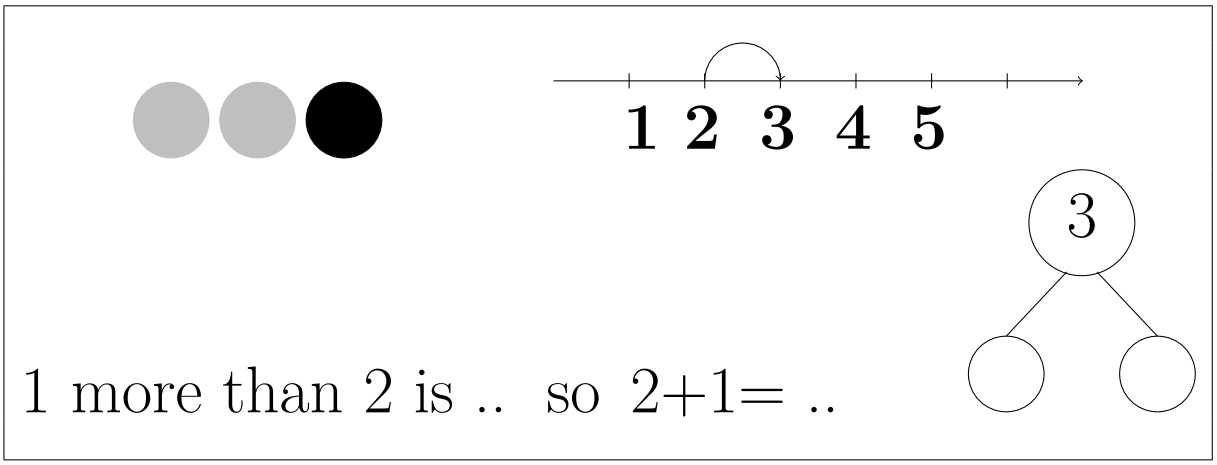


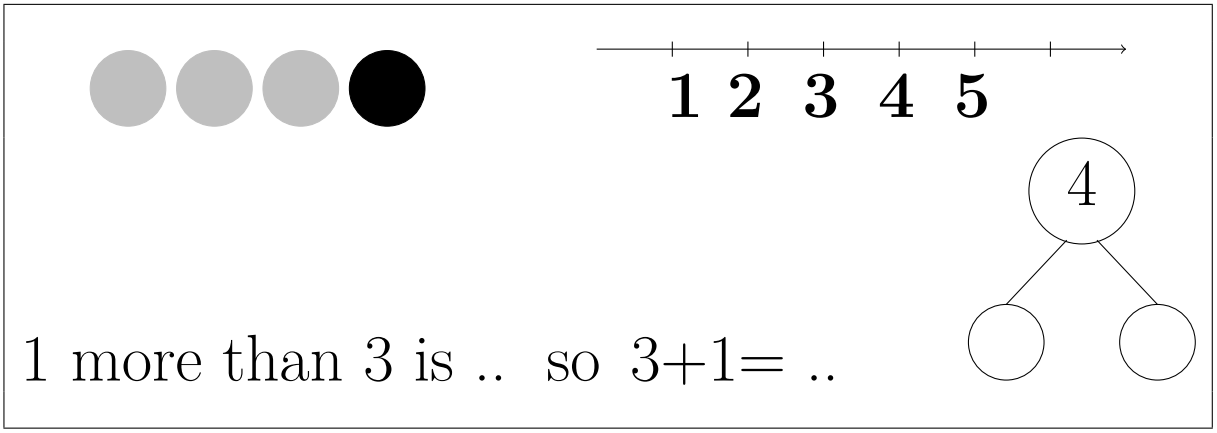


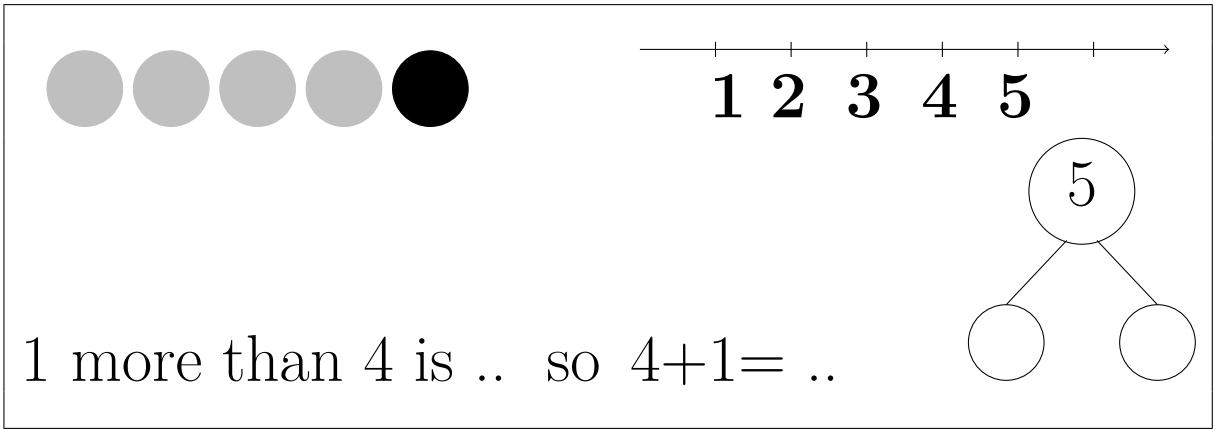


Exercise 16. *Complete.*

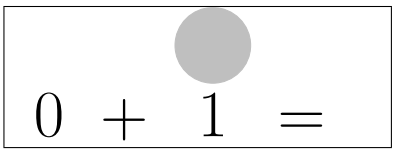


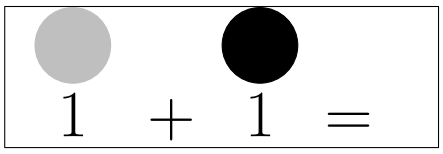


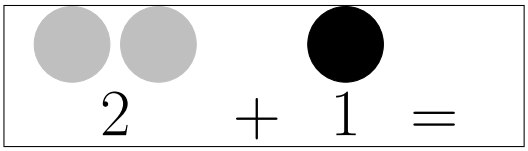


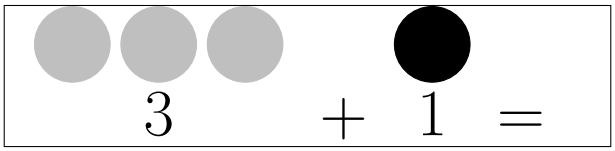


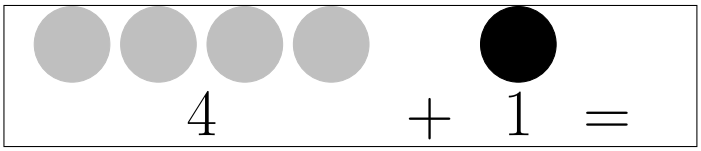
Exercise 17. *Sum up*





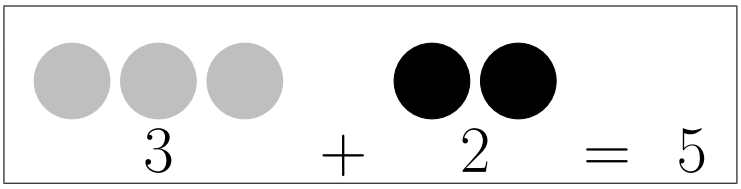


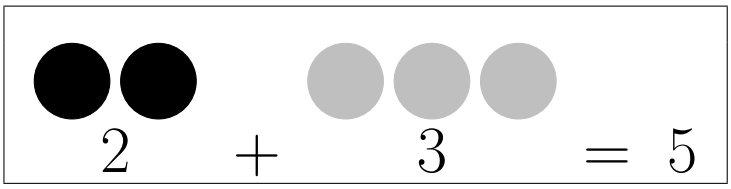




When we add a number whith 1, we get the next number.

Commutativity of addition

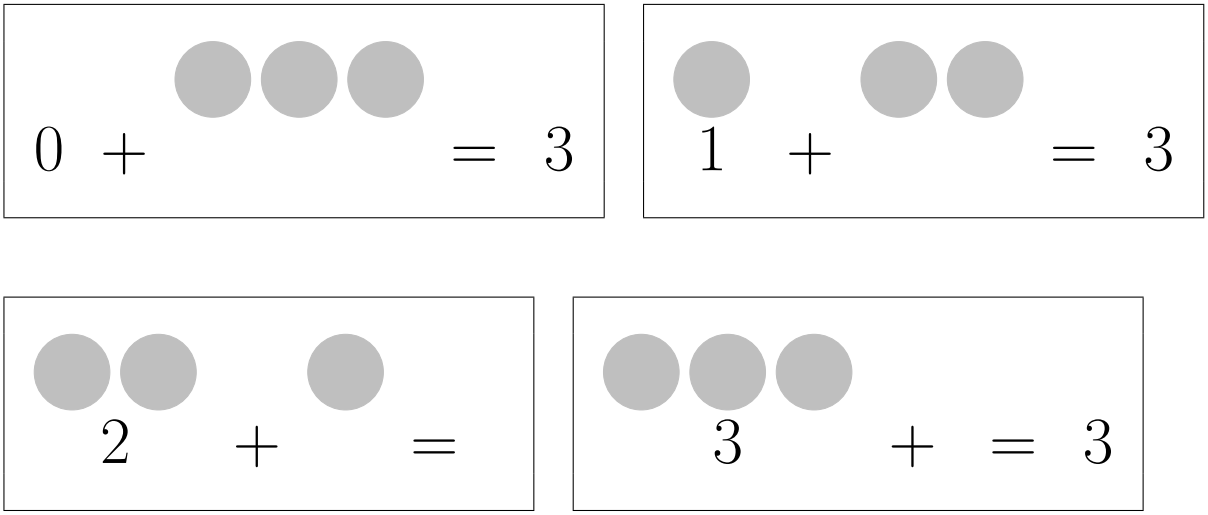




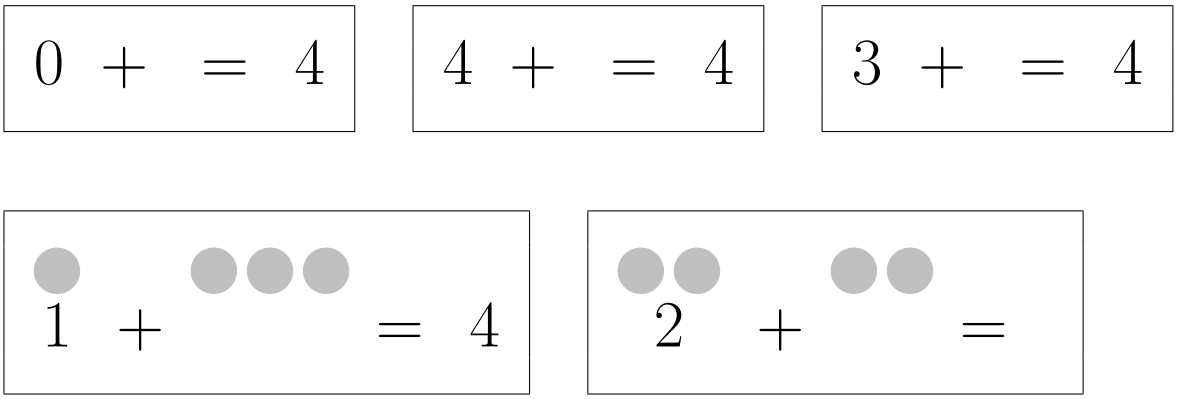
We have : 3+2=2+3=5

Addition is commutative

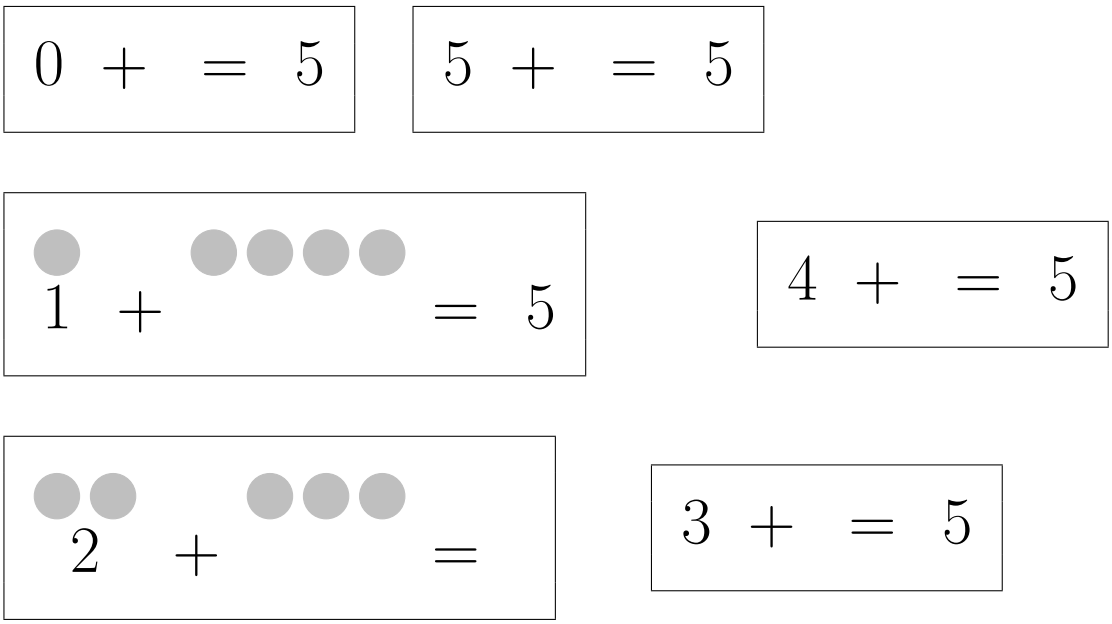
Exercise 18. *Complete the tables below.*



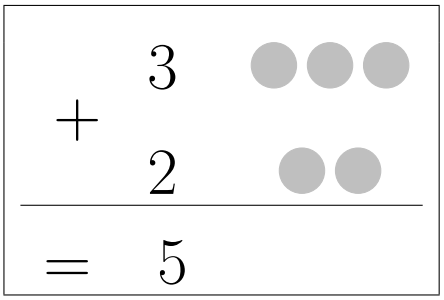
Exercise 19. *Complete the tables below.*



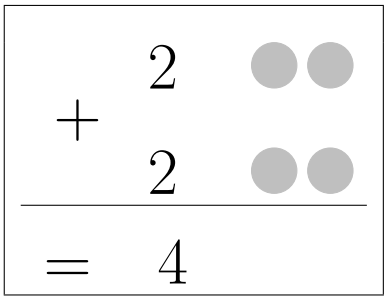
Exercise 20. *Complete the tables below.*



Vertical addition.



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



$$\begin{array}{r} 2 \\ + \\ 2 \\ \hline = \quad 4 \end{array}$$

Exercise 21. *Find the sums below..*

$$\begin{array}{r} 1 \\ + \\ 2 \\ \hline = \end{array}$$

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

$$\begin{array}{r} 1 \\ + \\ 4 \\ \hline = \end{array}$$

$$\begin{array}{r} 2 \\ + \\ 2 \\ \hline = \end{array}$$

$$\begin{array}{r} 1 \\ + \\ 0 \\ \hline = \end{array}$$

$$\begin{array}{r} 0 \\ + \\ 0 \\ \hline = \end{array}$$

Decompose

- We decompose three as sum of two numbers

$$3 = 0 + 3$$

$$3 = 3 + 0$$

$$3 = 1 + 2$$

$$3 = 2 + 0$$

- We decompose zero as sum of two numbers

$$0 = 0 + 0$$

- We decompose one as sum of two numbers

$1 = 0 + 1$ $1 = 1 + 0$

- We decompose two as sum of two numbers.

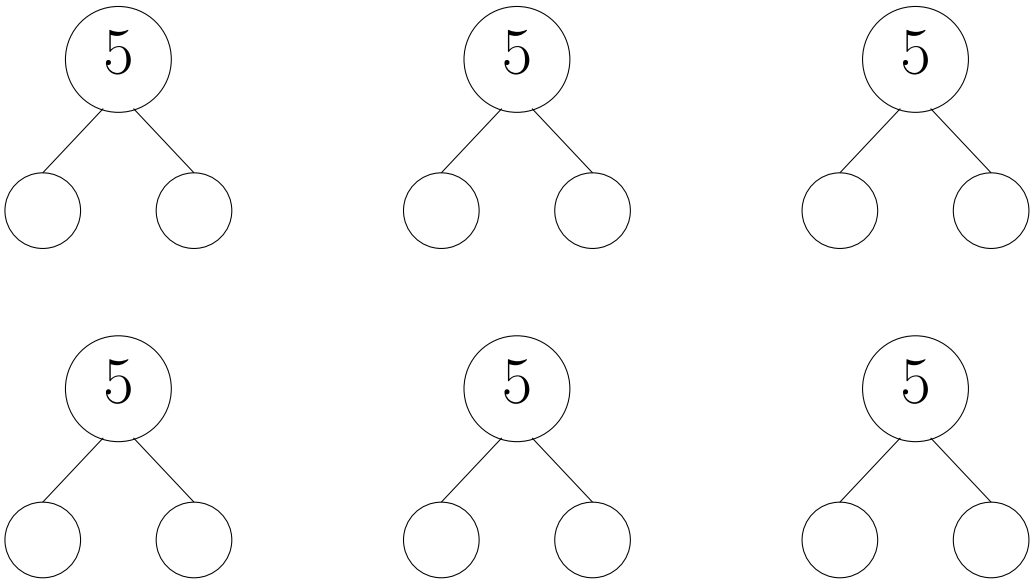
$2 = 0 + 2$ $2 = 2 + 0$ $2 = 1 + 1$

Exercise 22. *Decompose four as sum of two numbers.*

$4 = \quad + \quad$ $4 = \quad + \quad$ $4 = \quad + \quad$

$4 = \quad + \quad$ $4 = \quad + \quad$

Exercise 23. *Complete the number bonds (give all posibilitys).*



Exercise 24. *Circle all the boxes that total 5.*

$1+3$	$2+2$	$3+2$	$2+1$	$4+0$	$3+1$
$0+3$	$5+0$	$1+2$	$4+1$	$1+0$	$1+1$
$2+3$	$0+5$	$0+4$	$3+1$	$1+4$	$2+1$

Exercise 25. *Fill in the missing box and find the totals for all expressions. Use your completed addition chart to help you.*

$0+1$	$0+2$
$1+1$	$1+2$
	$2+2$
$3+1$	

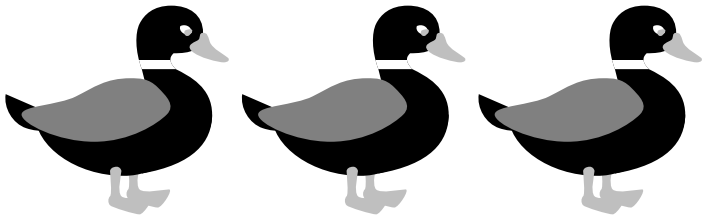
$1+0$	$2+0$
$1+1$	
	$2+2$
$1+3$	$2+3$

Exercise 26. *Circle all the boxes that total 4.*

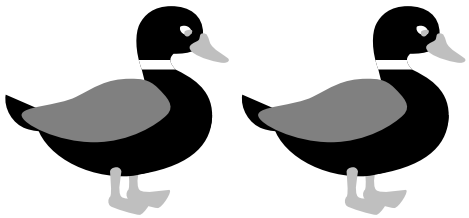
$1+3$	$2+2$	$3+2$	$2+1$	$4+0$	$3+1$
$0+3$	$5+0$	$1+2$	$4+1$	$1+0$	$1+1$
$2+3$	$0+4$	$0+5$	$3+1$	$1+4$	$2+1$

Word problems

Exercise 27.



3 ducks in the lake.



2 ducks arrive at the lake.

Make a number bond that shows the number of ducks.

How many ducks are there? Write the addition sentence.

.....

Exercise 28.

Jane have 2 red pens and 2 blue pens.

Make a number bond that shows the number of pens.

How many pens Jane have? Write the addition sentence.

.....

Exercise 29.

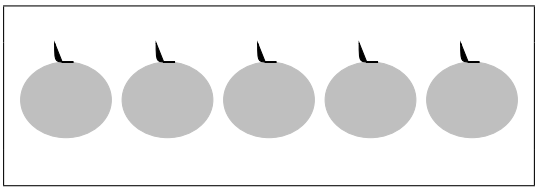
There are 2 kids in the parck and 3 kids come .

Make a number bond that shows the number of kids in the parck.

How many kids are there? Write the addition sentence.

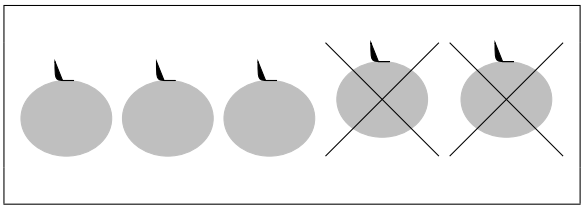
.....

1.5 Subtraction



I have 5 apples. I eat 2 apples.

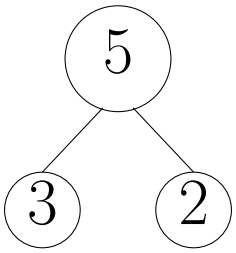
How many apples left?

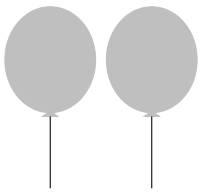


3 apples left.

So 5 - 2 = 3

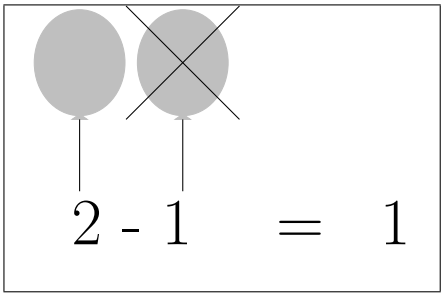
The number bond:





I have 2 balloons. One balloon brust.

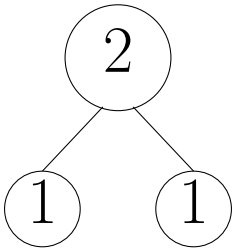
How many balloons left?



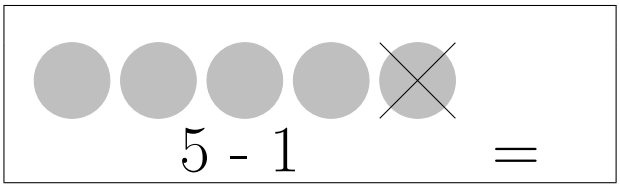
One balloon left.

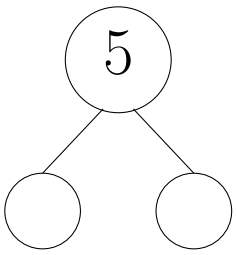
So 2 - 1 = 1

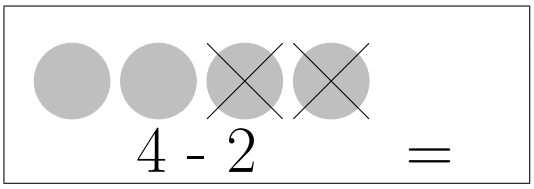
The number bond:

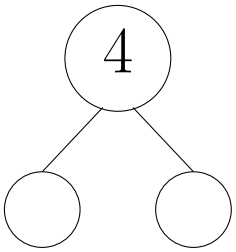


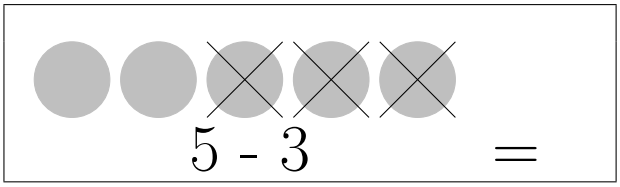
Exercise 30. *Finde the difference and complete the number bond.*

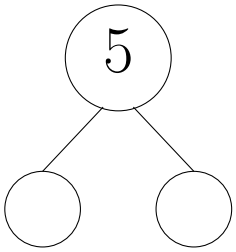


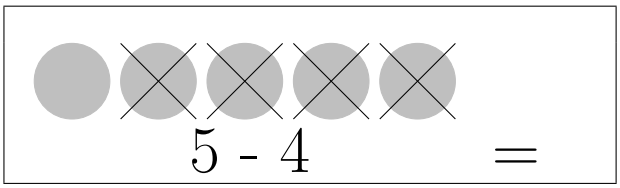


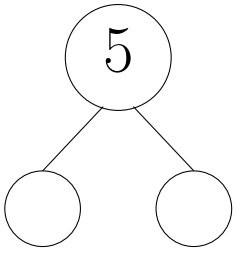




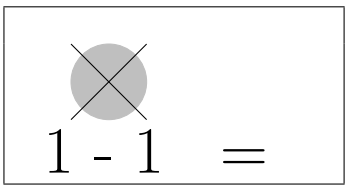


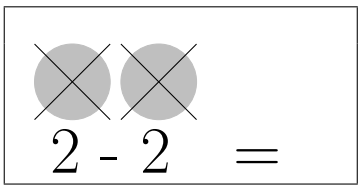


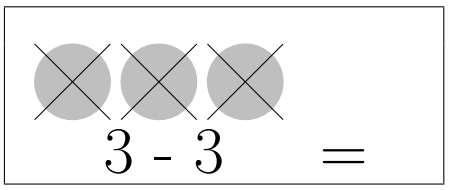


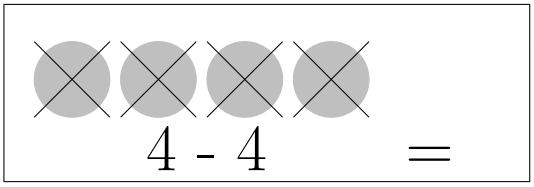


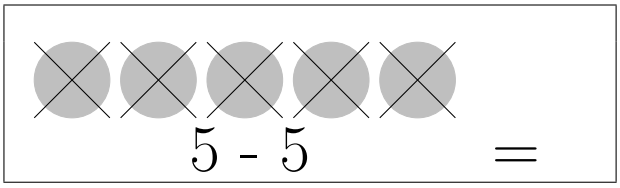
Exercise 31. *Complete*





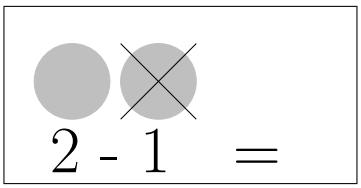


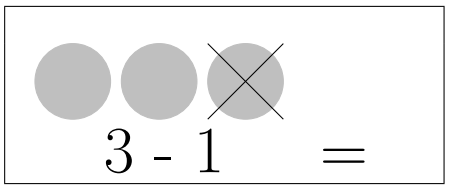


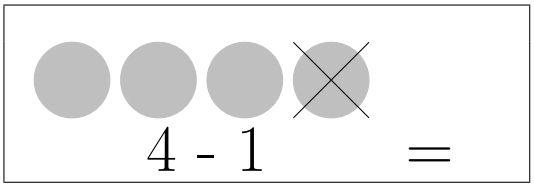


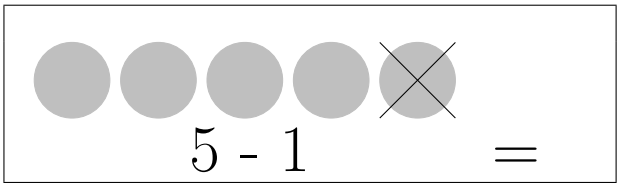
When we substract a number from itself, we get zero.

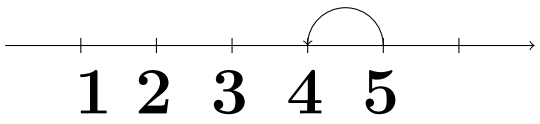
Exercise 32. *Finde the difference.*





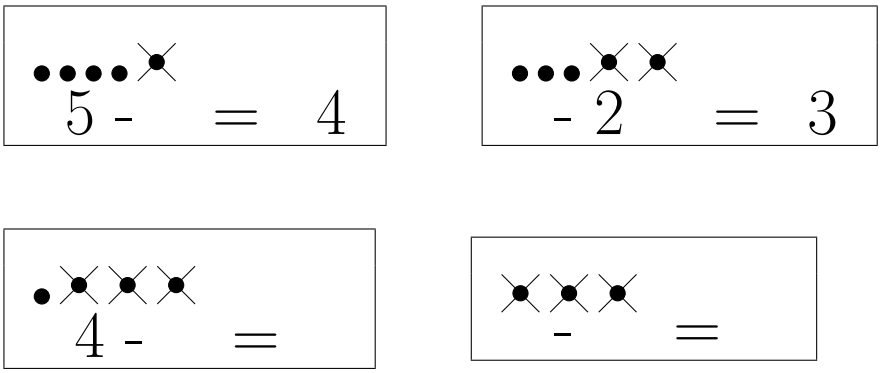




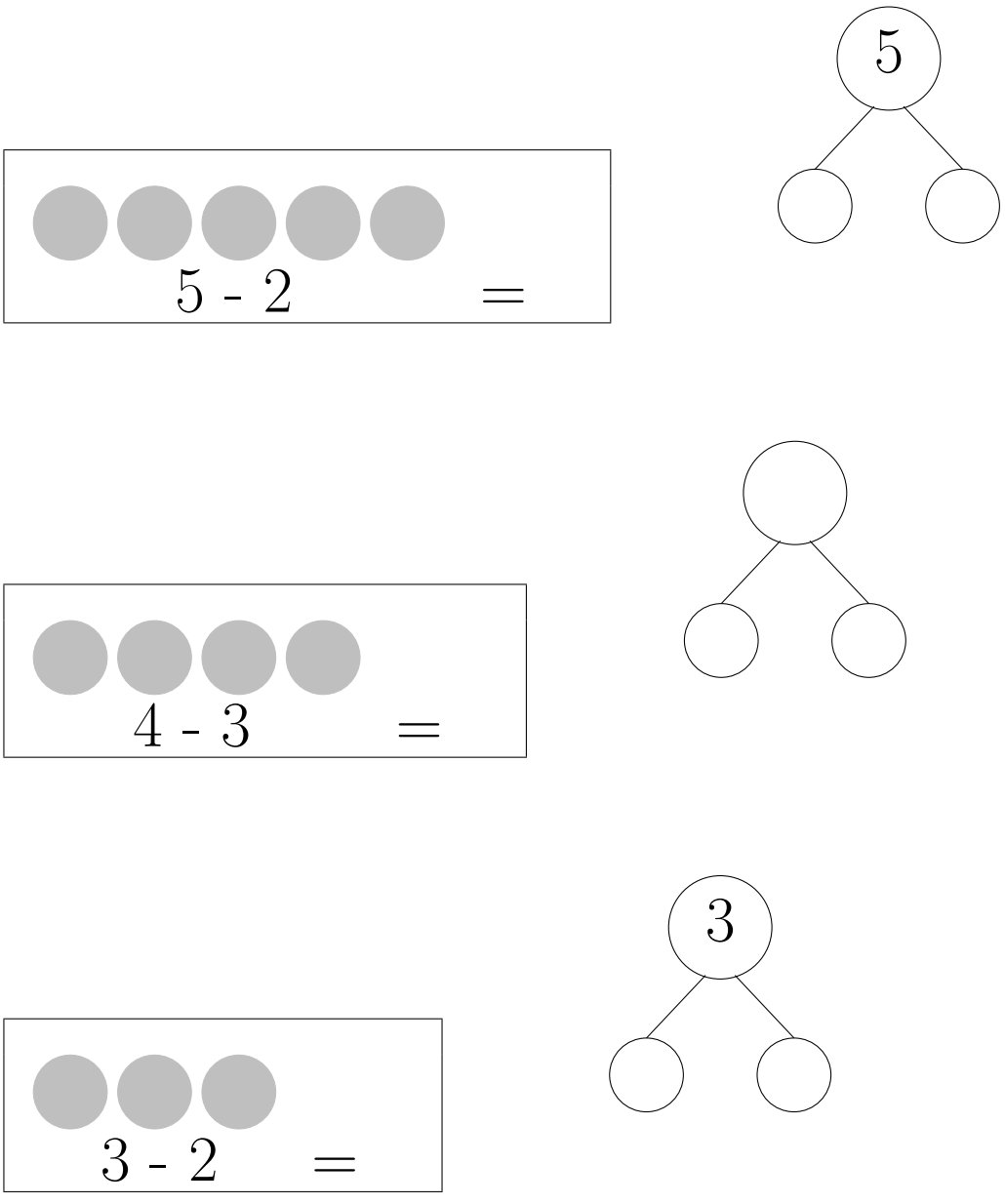


When we substract 1 from a number we get the predecessor of this number.

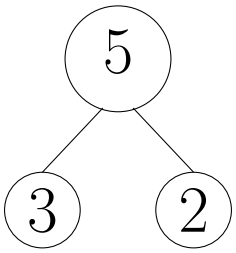
Exercise 33. *Finde the numbers missing*



Exercise 34. *Cross off the circles and find the difference*

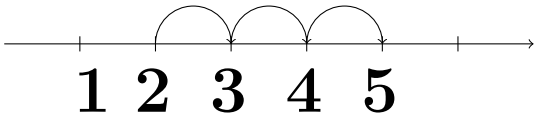


1.6 Addition and substraction are inverse operations.

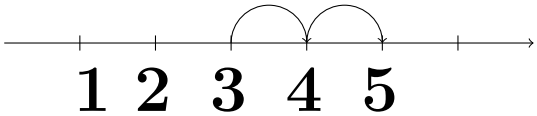


Whith this number bond we can make 4 math sentences: two additions and two substractions

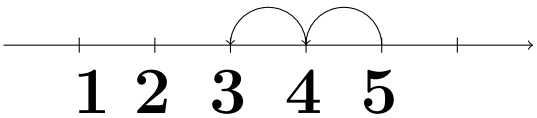
$2 + 3 = 5$



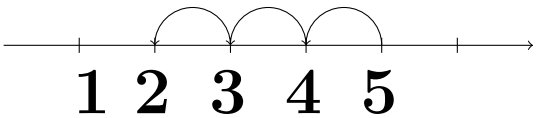
$3 + 2 = 5$



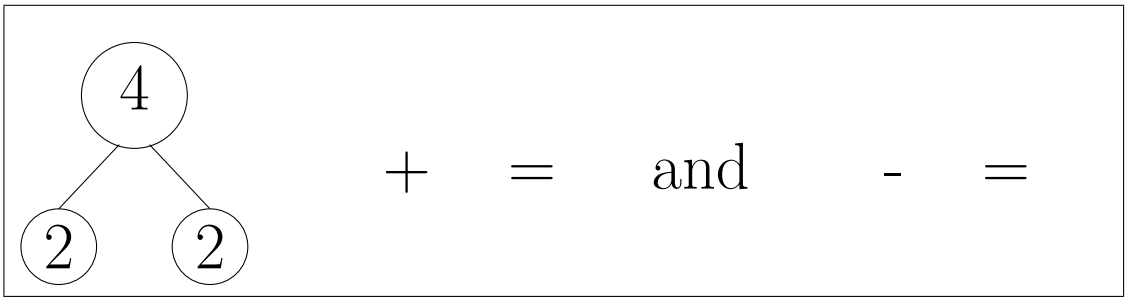
$5 - 2 = 3$

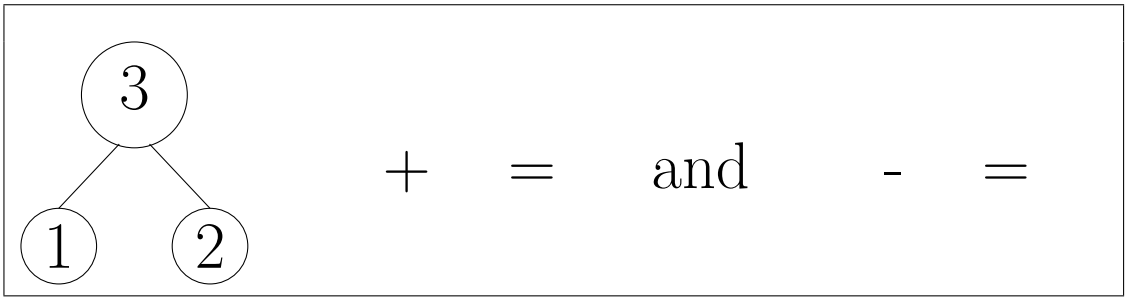


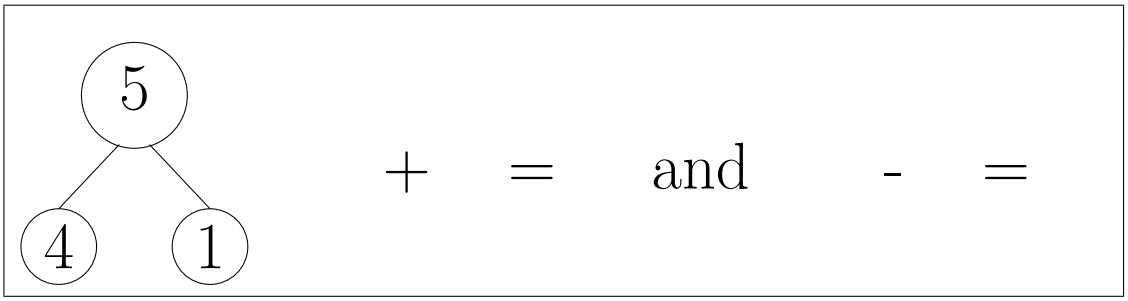
$5 - 3 = 2$

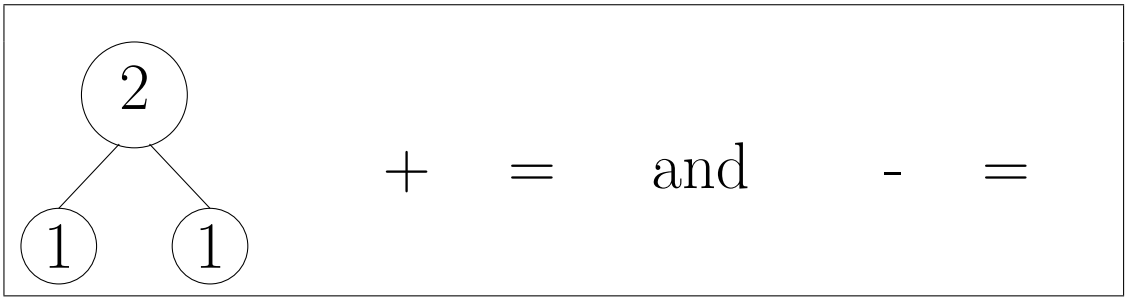


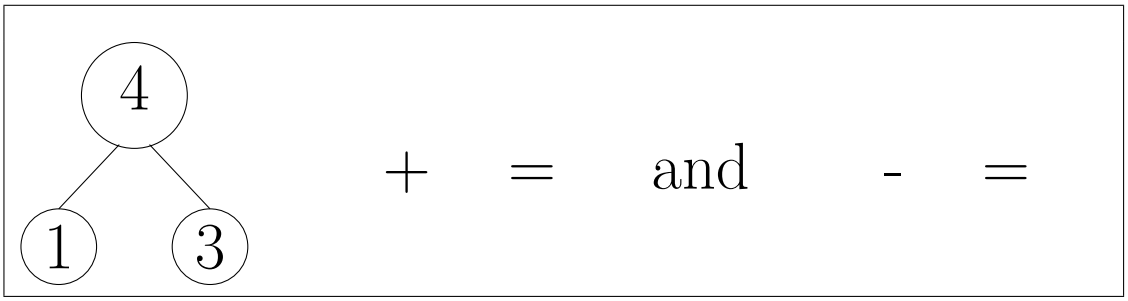
Exercise 35. *Complete the math sentences from the number bond.*











Exercise 36. *Complete.*

$2 + 1 = 3$ so $3 - 2 =$

$2 + 3 = 5$ so $5 - 2 =$

$5 + 0 = 5$ so $5 - 0 =$

$2 + 2 = 4$ so $4 - 2 =$

$3 + 1 = 4$ so $4 - 1 =$

Exercise 37. *Finde the difference.*

$3 - 1 =$

$5 - 3 =$

$4 - 1 =$

$4 - 3 =$

$5 - 1 =$

$5 - 4 =$

Vertical substraction.

$$\begin{array}{rr} & 5 \\ - & 2 \\ \hline = & 3 \end{array}$$

Exercise 38. *Calculate the differences below*

$$\begin{array}{rr} & 2 \\ - & 2 \\ \hline = & \end{array} \qquad \begin{array}{rr} & 3 \\ - & 2 \\ \hline = & \end{array} \qquad \begin{array}{rr} & 4 \\ - & 2 \\ \hline = & \end{array}$$

$$\begin{array}{rr} & 5 \\ - & 4 \\ \hline = & \end{array} \qquad \begin{array}{rr} & 3 \\ - & 1 \\ \hline = & \end{array} \qquad \begin{array}{rr} & 2 \\ - & 2 \\ \hline = & \end{array}$$

$$\begin{array}{rr} & 5 \\ - & 3 \\ \hline = & \end{array} \qquad \begin{array}{rr} & 5 \\ - & 1 \\ \hline = & \end{array} \qquad \begin{array}{rr} & 4 \\ - & 3 \\ \hline = & \end{array}$$

1.7 Word problems

Exercise 39.

There are 5 bees in garden.

3 bees flew away.

Make a number bond that shows the number of bees.

How many bees left in the garden?

.....

Exercise 40.

We need 5 tomatoes to make our sauce for dinner. We have only 2 tomatoes.

(a) How many more tomatoes do we need ?

Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond to shows the story.

(c) Write the addition sentence and a substruction sentence to match the story.

....

Exercise 41.

There are 1 bird on the tree.

Some more birds join it.
Now there are 3 bird on the tree.

(a) How many birds join it?

Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond to shows the story.

(c) Write the addition sentence and a substruction sentence to match the story.

....

Exercise 42.

There are 3 students in the classroom.

Some more students join them.
Now there are 5 students in the classroom.

(a) How many students join them?

Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond to shows the story.

(c) Write the addition sentence and a substruction sentence to match the story.

....

Exercise 43.

Kate confused about this problem :

$$\ldots = 4 - 2$$

Write two addition number sentences that might help her understand and solve it.

Explain to Kate using words, pictures, or numbers, too.

Exercise 44.

Jhon confused about this problem :

$$\ldots = 5 - 3$$

Write two addition number sentences that might help him understand and solve it.

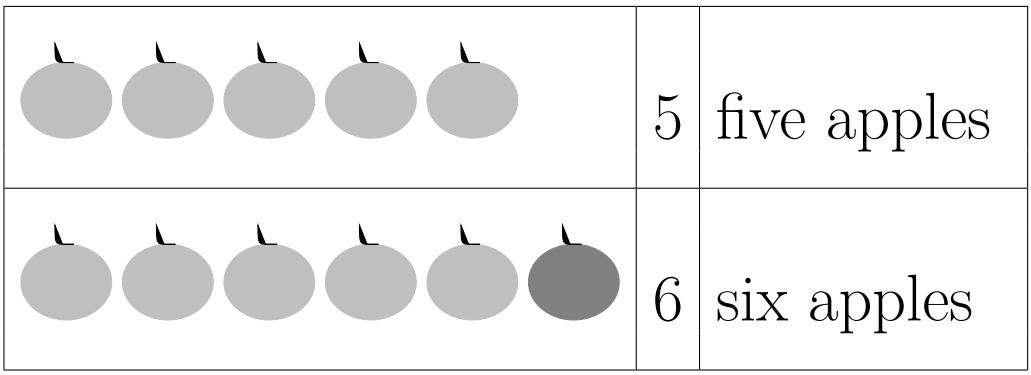
Explain to Jhon using words, pictures, or numbers, too.

Chapter 2

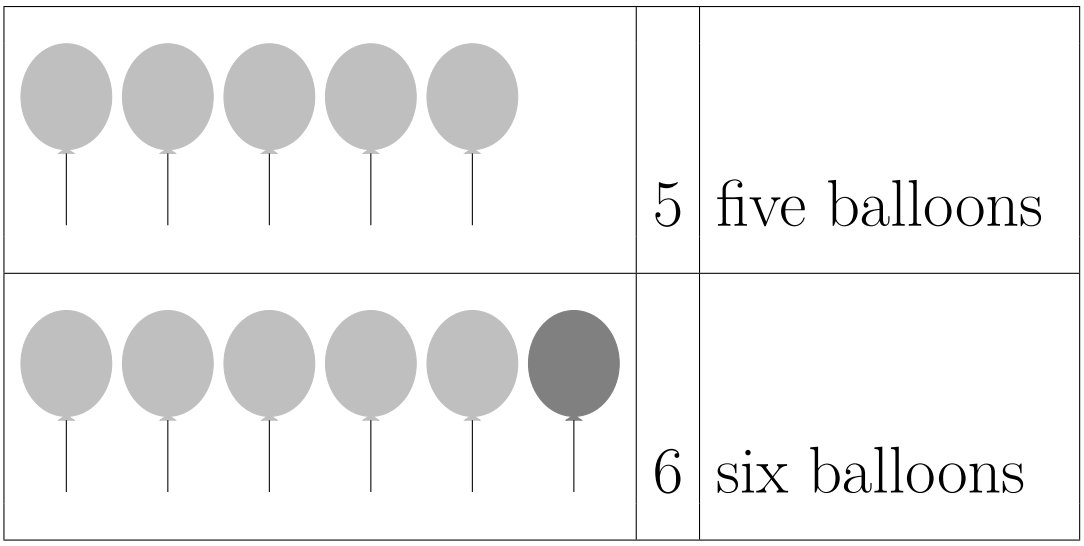
Up to ten.

2.1 Number counted up to ten.

Five and six



	5	five apples
	6	six apples



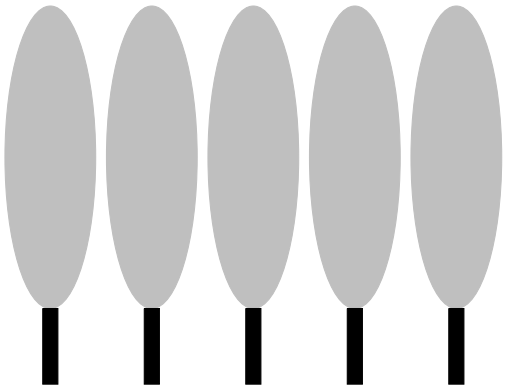
	5	five balloons
	6	six balloons

Exercise 45. *Trace the numbers using a pencil or pen.*

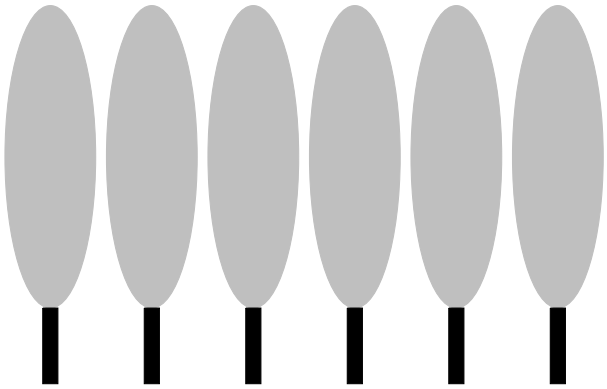
5 5 5 5 5 5

6 6 6 6 6 6

Exercise 46. *How many trees are there ?*

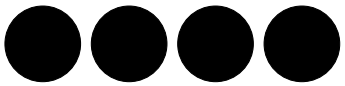


Ther are ... trees.



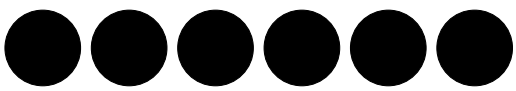
Ther are ... trees.

Exercise 47. *How many circles are there ?*



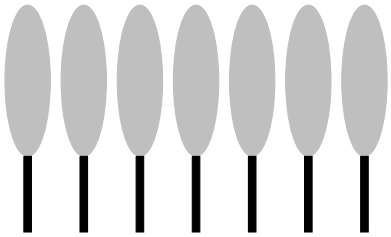
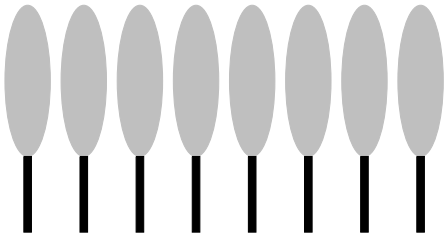
Ther are ... circles.

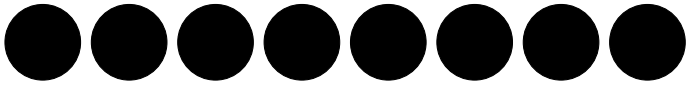
Ther are ... circles.



Ther are ... circles.

Seven and eight

	7	seven trees
	8	eight trees

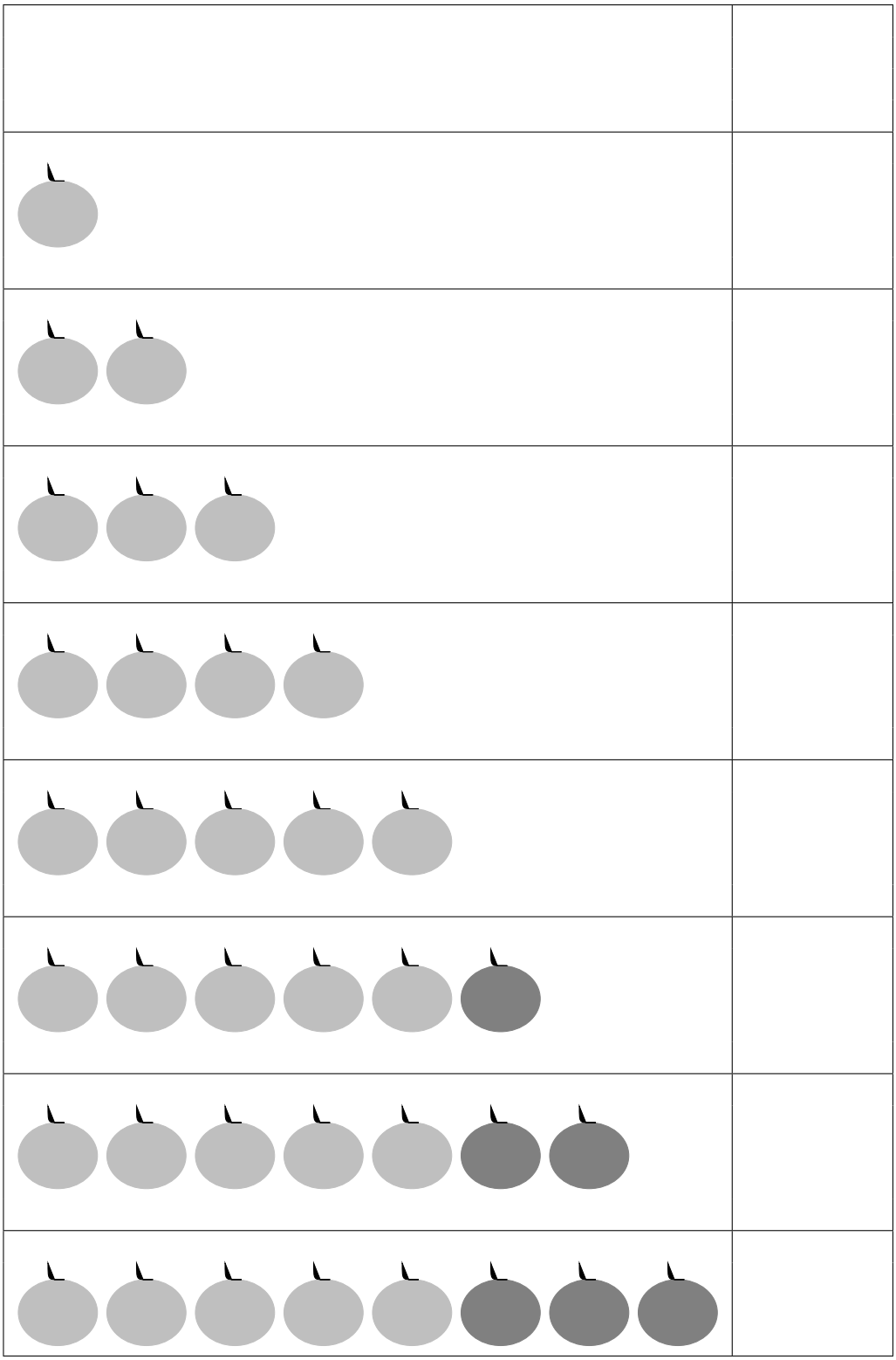
	7	seven circles
	8	eight circles

Exercise 48. *Trace the number using a pencil or pen.*

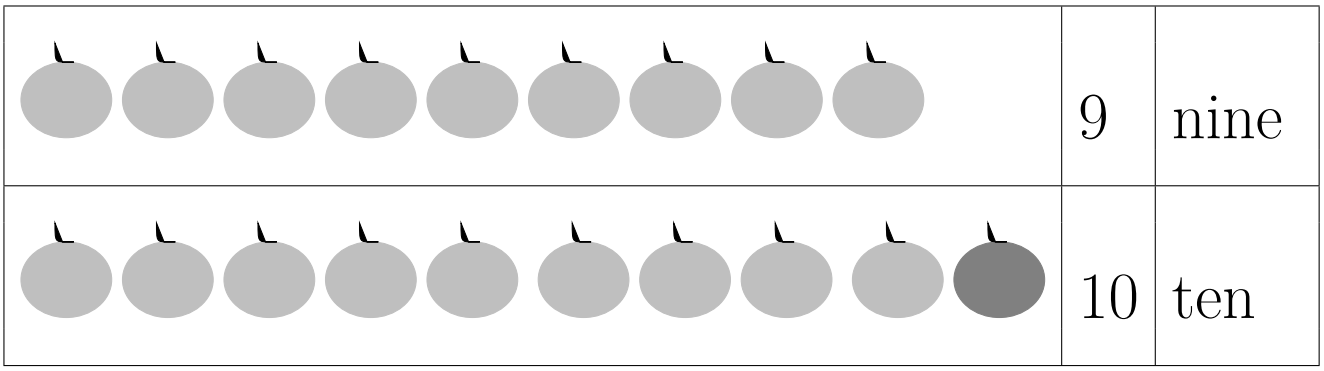
7 7 7 7 7 7

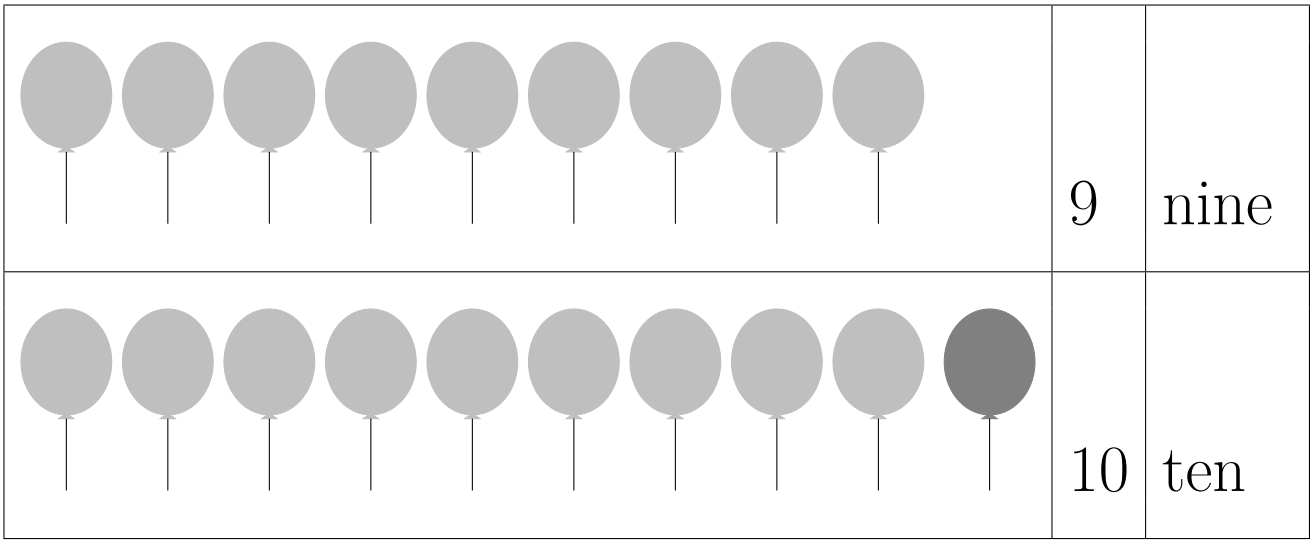
8 8 8 8 8 8

Exercise 49. *How many apples are there ?*



Nine and ten





Exercise 50. *Trace the number using a pencil or pen.*

9 9 9 9 9 9

10 10 10 10 10 10

Exercise 51. *Complete the tables.*

••	2	
•••		three
••••		four
•••••		five
••••••		six
•••••••	7	
••••••••		eight
•••••••••		nine
••••••••••		ten

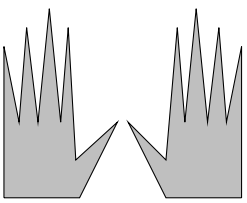
♡ ♡ ♡ ♡ ♡ ♡ ♡ ♡ ♡ ♡	10	
♡ ♡ ♡ ♡ ♡ ♡ ♡ ♡ ♡	9	
♡ ♡ ♡ ♡ ♡ ♡ ♡ ♡	8	
♡ ♡ ♡ ♡ ♡ ♡ ♡		seven
♡ ♡ ♡ ♡ ♡ ♡	6	
♡ ♡ ♡ ♡ ♡	5	
♡ ♡ ♡ ♡	4	
♡ ♡ ♡	3	
♡ ♡		two

Exercise 52.

••
•
• • • •
• • • • • •
• • • • • • •
• • •
• • • • •
• • • • • • • • • •
• • • • • • • • •
• • • • • • • •

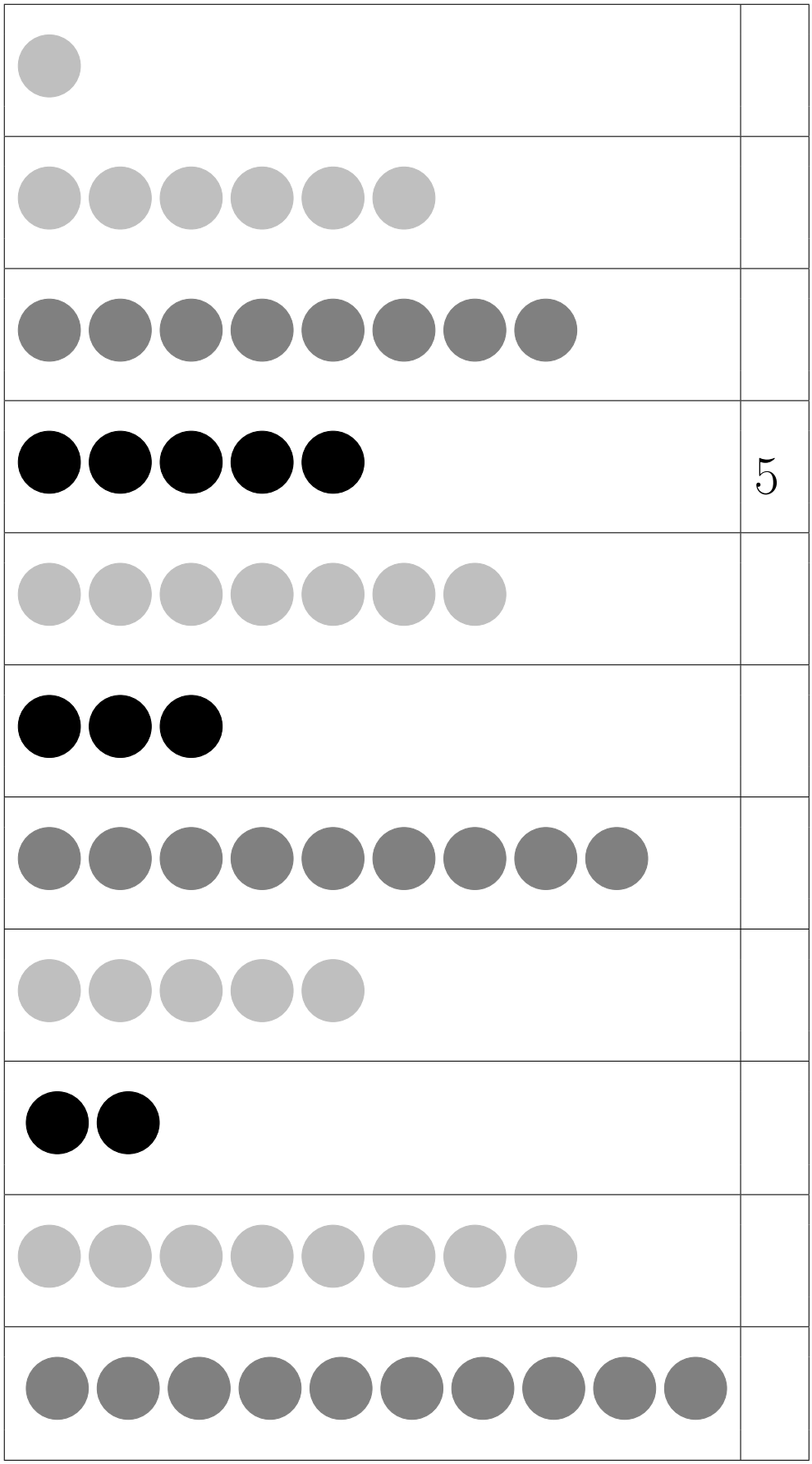
0
1
2
3
4
5
6
7
8
9
10

three
zero
one
two
six
nine
ten
four
eight
seven
five

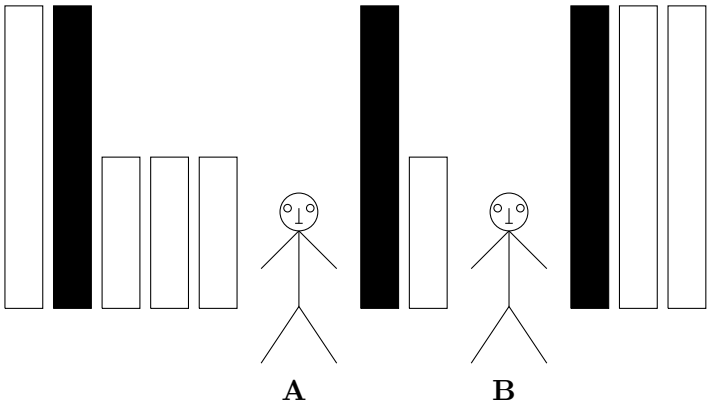


I have ten fingers in my two hands.

Exercise 53. *How many circles are there ?*

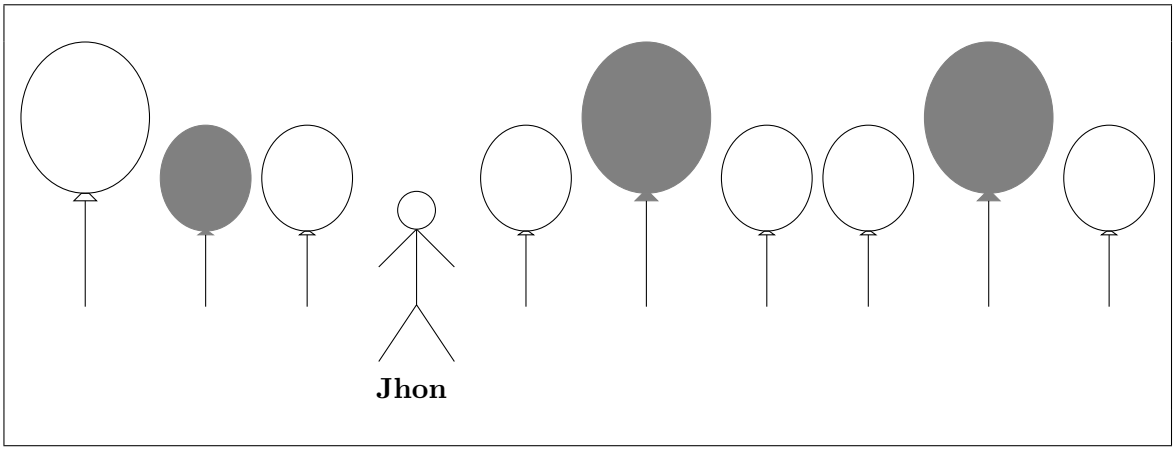


Exercise 54.



How many black rectangles are there ?	3
How many white rectangles are there ?	
How many rectangles are there ?	
How many short rectangles are there ?	
How many tall rectangles are there ?	
How many green rectangles are there ?	
How many rectangles between A and B ?	
How many rectangles on the right of B ?	
How many rectangles on the left of A ?	5

Exercise 55.



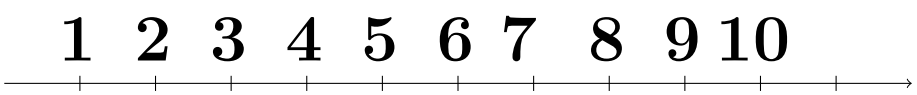
How many yellow balloons are there ?	
How many gray balloons are there ?	
How many big gray balloons are there ?	
How many white balloons are there ?	
How many big balloons are there ?	
How many small balloons are there ?	
How many balloons are there ?	
How many balloons on the right of Jhon ?	
How many balloons on the left of Jhon ?	

Exercise 56. *How many letters are there in each word ?*

in	2
are	
car	
hand	
star	
letter	
number	
fish	
peoples	
rectangle	
balloon	
yellow	
color	

the	
things	
rectangles	
house	
robot	
between	7
left	
right	
tall	
short	
big	
small	
green	

2.2 Number after, before and between.



The number comes between 5 and 7 is 6.
The number comes after 6 is 7.
The number comes before 7 is 6.

Exercise 57.

Which number comes between 4 and 6 ?	
Which number comes between 7 and 9 ?	
Which number comes between 1 and 3 ?	
Which number comes after 5?	
Which number comes after 7 ?	
Which number comes after 8 ?	
Which number comes after 6 ?	
Which number comes before 5 ?	
Which number comes before 10 ?	

Exercise 58. *Write the number comes after.*

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

Exercise 59. *Write the number comes before.*

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

Exercise 60. *Write the number comes between.*

4		6
5		7
6		8
7		9
2		4
8		10

Exercise 61. *Write the missing number.*

1		3		5		7		9	
	2		4		6		8		10

2.3 Ordinal numbers

Cardinal	
1	one
2	two
3	three
4	four
5	five
6	six
7	seven
8	eight
9	nine
10	ten

Ordinal	
1st	first
2nd	second
3rd	third
4th	fourth
5th	fifth
6th	sixth
7th	seventh
8th	eighth
9th	ninth
10th	tenth

The first letter of the word numbers is n.

The second letter of the word numbers is u.

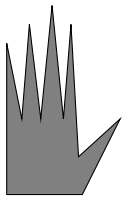
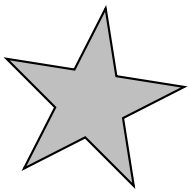
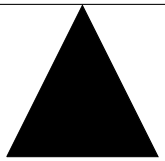
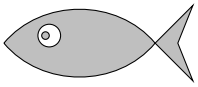
The third letter of the word numbers is m.

The fourth letter of the word numbers is b.

The fifth letter of the word numbers is e.

The sixth letter of the word numbers is r.

Exercise 62. *What is the first letter of each word below?*

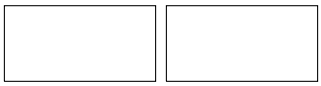
	dog	
	apple	a
	circle	
	hand	
	star	
	triangle	
	fish	

Exercise 63. *What is the first letter of each word below?*

in	i
are	
cat	
ordinal	
square	
how	
number	
first	
pen	
rectangle	
book	
year	
month	

many	
things	
before	
what	
robot	
triangles	t
dog	
left	
right	
vertical	
play	
letter	
substraction	

Exercise 64. *Fill in the blanks.*



two rectangles

How many letters in the word rectangles are there ? ....

The first letter of the word rectangles is ....

The second letter of the word rectangles is ....

The third letter of the word rectangles is ....

The fourth letter of the word rectangles is ....

The sixth letter of the word rectangles is ....

The seventh letter of the word rectangles is ....

The ninth letter of the word rectangles is ....

The tenth letter of the word rectangles is ....

Exercise 65. *Fill in the blanks.*

There are seven days in a week : monday, tuesday, wednesday, thursday, friday, saturday and sunday.

The first day in a week is monday

The seconde day in a week is tuesday

The third day in a week is .....

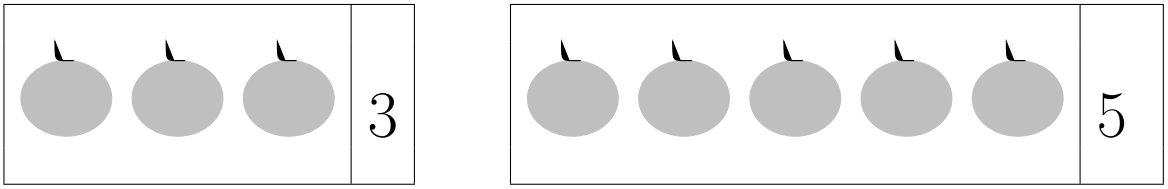
The fourth day in a week is .....

The fifth day in a week is .....

The sixthth day in a week is .....

The seventh day in a week is .....

2.4 Comparison of numbers



- In the left box there are less apples than in the right box.

We say 3 less than 5

or 3 smaller than 5.

We write $3 < 5$

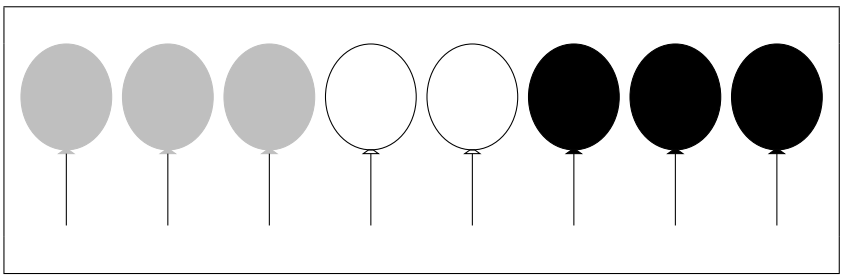
- In the right box there are more apples than in the left box.

We say 5 more than 3

(or 5 greater than 3)

(or 5 bigger than 3.)

We write $5 > 3$



- There are more black balloons than white balloons.

3 is greater than 2

$$3 > 2$$

- There are less white balloons than gray balloons.

2 is less than 3

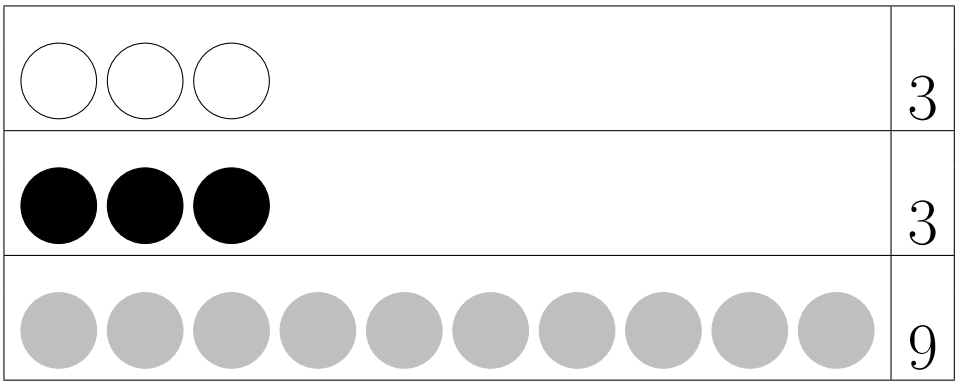
$$2 < 3$$

- There are the same number of black balloons as gray balloons

3 equal to 3

$$3 = 3$$

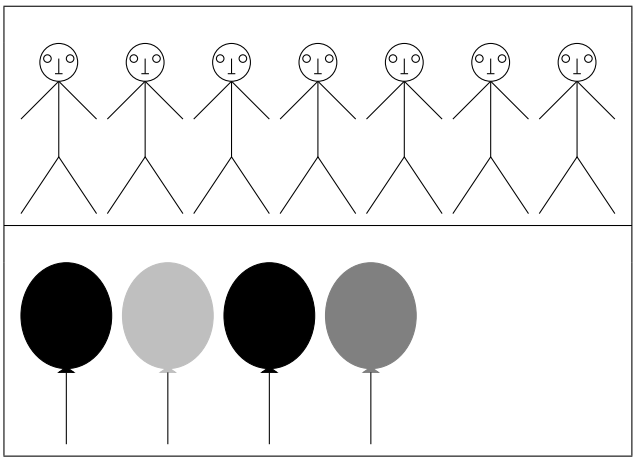
Exercise 66. *Fill in the blanks with more, less, >, < or =*



- There are ..... white circles than gray circles
- There are ..... gray circles than black circles

- 3 ... 9
- 9 ... 3
- 3 ... 3

Exercise 67. *Fill in the blanks with more, less, > or <*



- There are ..... childrens than balloons
- There are ..... balloons than childrens

- 7 ... 4
- 4 ... 7

Exercise 68. *Fill in the blanks with greater, less, > or <*

- Seven is ..... than four. So 7 ... 4.
- Four is ..... than seven . So 4 ... 7.
- Three is ..... than ten. So 3 ... 10.
- Ten is ..... than three . So 10 ... 3.
- One is ..... than five . So 1 ... 5.
- Six is ..... than eight. So 6 ... 8.
- Nine is ..... than two . So 9 ... 2.

Exercise 69. *Fill in the blanks with > , < or =*

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

Ascending order and descending order

• • • • • • • • •	••	• • • • •
9	2	5

- The least number is 2.
- The greatest number is 9.
- $2 < 5 < 9$. The ascending order is 2, 5, 9.
- $9 > 5 > 2$. The descending order is 9, 5, 2.

Exercise 70.

•••••••••	•	••••••••••	••••••
9	1	10	6

- The least number is ...
- The greatest number is ...
- ... < ... < ... < ....

The ascending order is ..., ..., ..., ...

- ... > ... > ... > ... .

The descending order is ..., ..., ..., ...

Exercise 71. *Arrange the number in ascending order.*

7	1	3	10	5

2	8	4	10	6

9	1	10	7	5

5	3	10	1	2

Exercise 72. *Arrange the number in descending order.*

7	1	3	10	5

2	8	4	10	6

9	1	3	7	5

5	3	9	1	2

9	6	8	7	10

Exercise 73. *Circle the least (smallest) number.*

7	1	9	10	5

8	6	9	10	5

Exercise 74. *Circle the greatest (biggest) number.*

6	1	7	2	5

8	6	9	3	5

Exercise 75. *Fill in the blanks with smallest, biggest, bigger or smaller, then give the orders.*

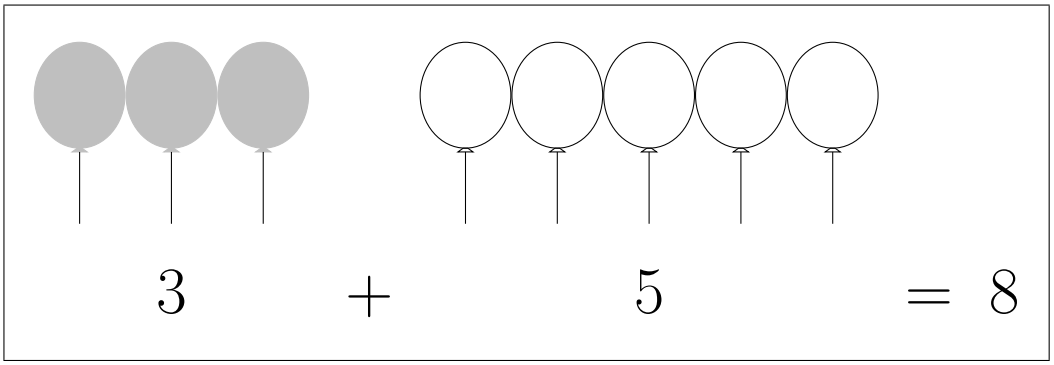
6	9	7	2	5

- 2 is the ..... number of the list.
- 9 is the ..... number of the list.
- 2 is ..... than 7.
- 5 is ..... than 2.
- The ascending order is ..., ..., ..., ..., ...
- The descending order is ..., ..., ..., ..., ...

2.5 Addition

- I buy 3 gray balloons and 5 white balloons.

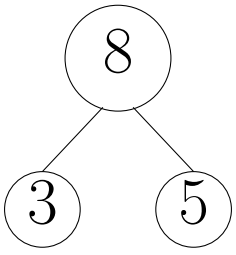
How many balloons I have?



I have 8 balloons. So

$$3 + 5 = 8$$

The number bond:

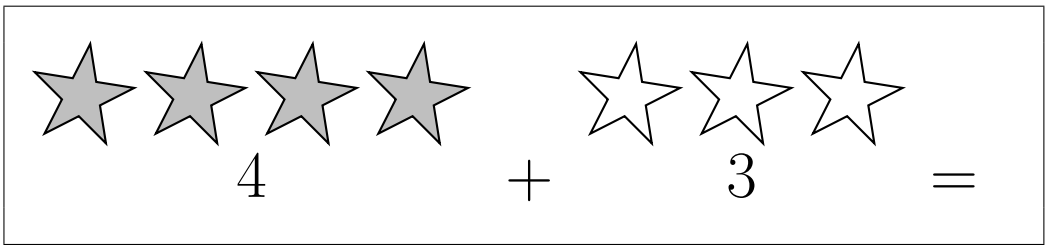


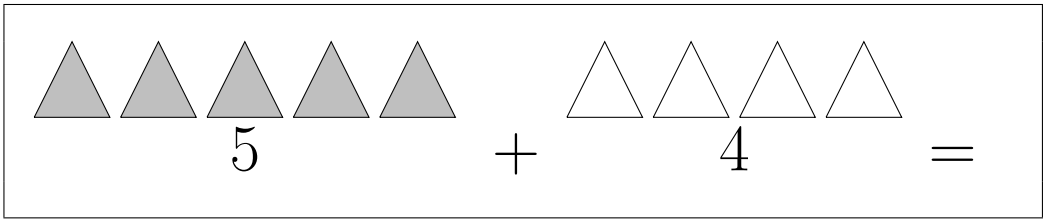
We can write 4 addition sentences

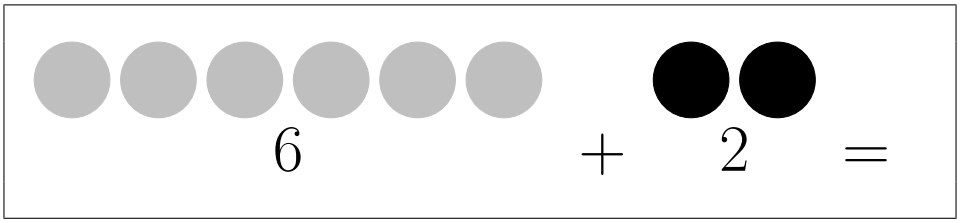
$3 + 5 = 8$ $\qquad$ $8 = 3 + 5$

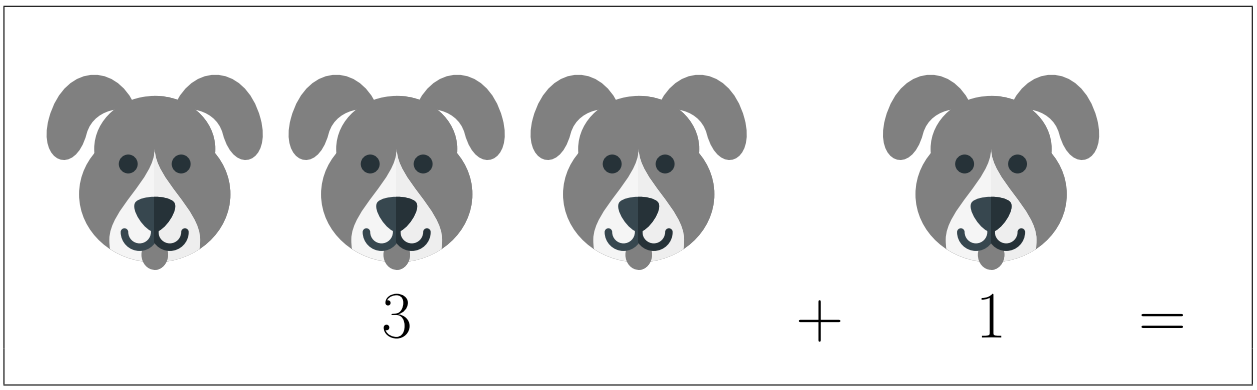
$5 + 3 = 8$ $\qquad$ $8 = 5 + 3$

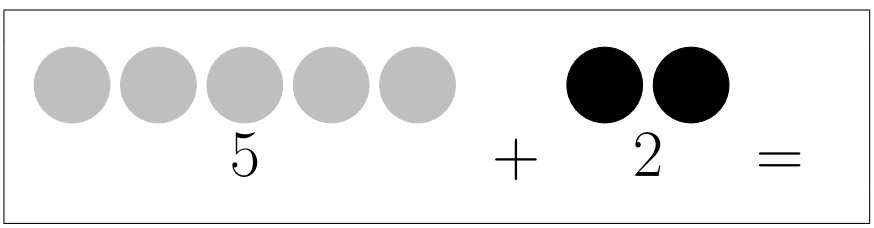
Exercise 76. *Sum up.*





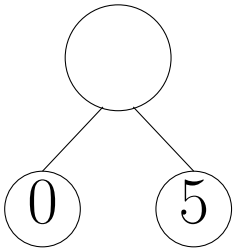




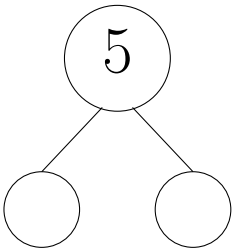


Exercise 77. *Complete*

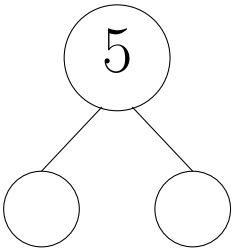
$0 + \quad 5 \quad =$



$1 + \quad 4 \quad =$



$2 \quad + \quad 3 \quad =$



$5 = 5 +$

$5 = 4 +$

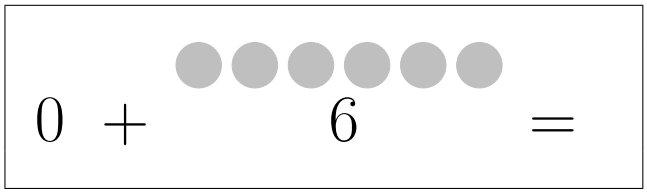
$5 = 3 +$

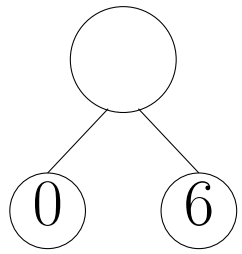
$5 = 0 +$

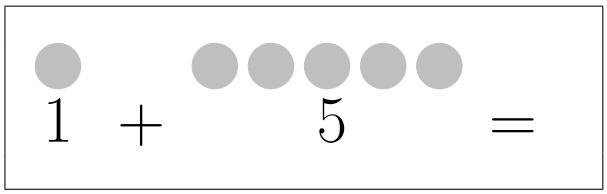
$5 = 1 +$

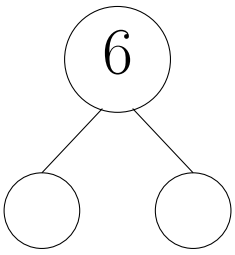
$5 = 2 +$

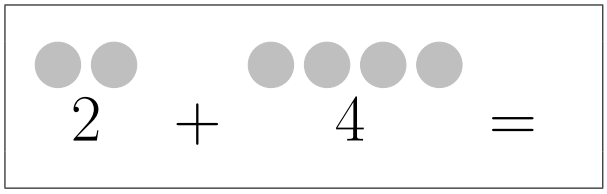
Exercise 78. *Complete.*

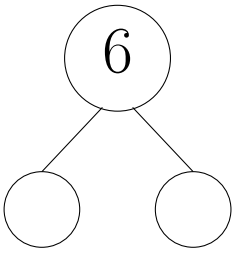


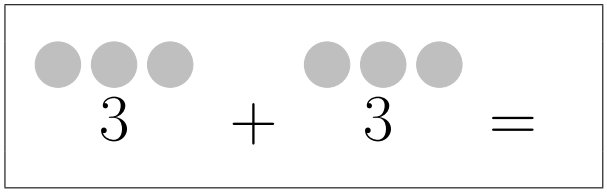


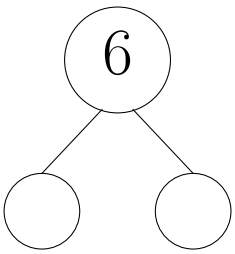


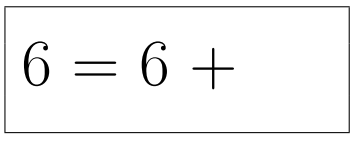


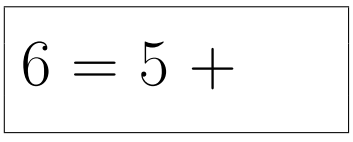


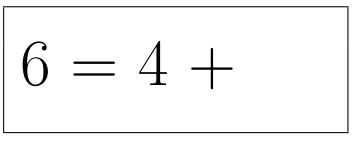


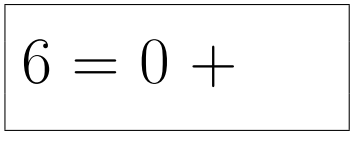


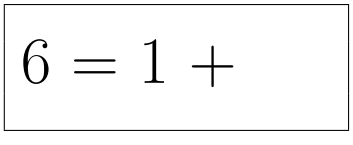


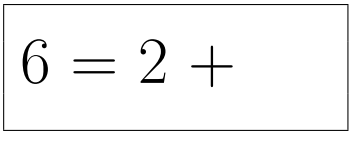




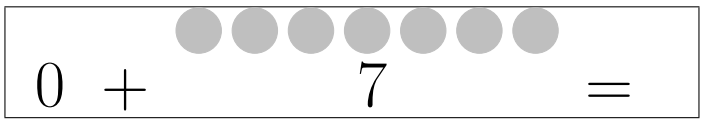


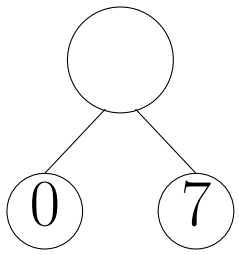


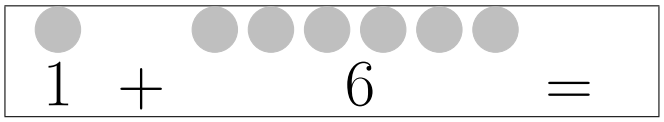


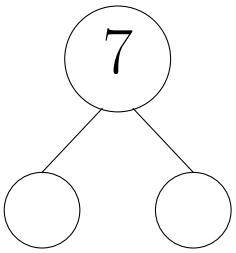


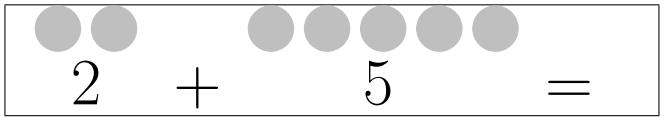
Exercise 79. *Complete*

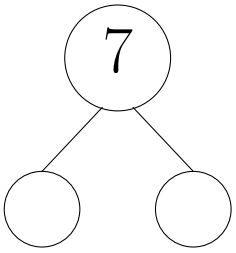


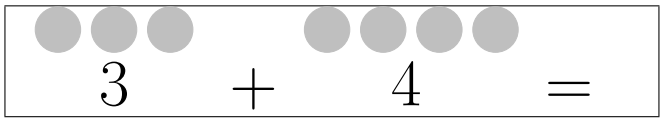


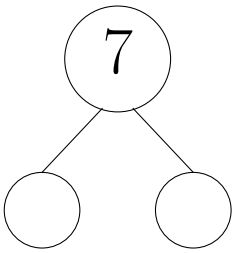








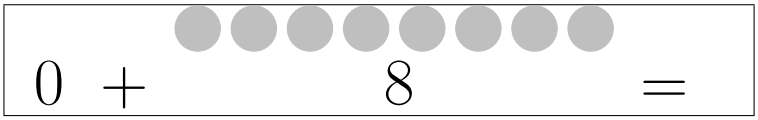


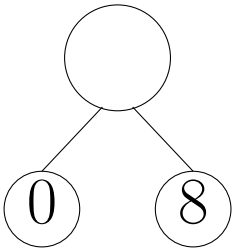


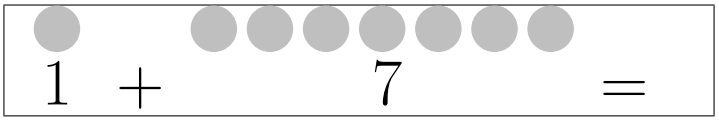
$7 = 7 +$ $7 = 6 +$ $7 = 5 +$

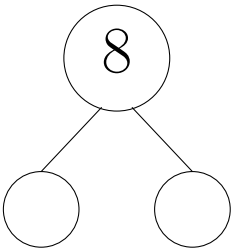
$7 = 4 +$ $7 = 3 +$ $7 = 2 +$

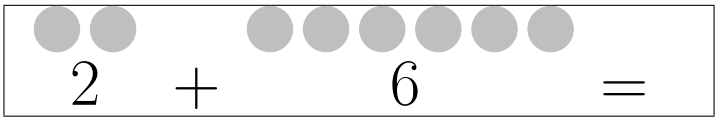
Exercise 80. *Complete*

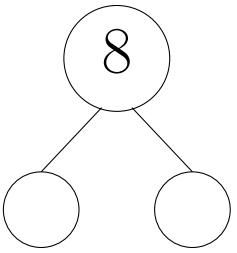


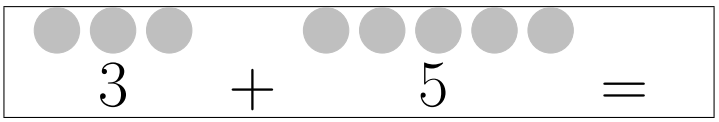


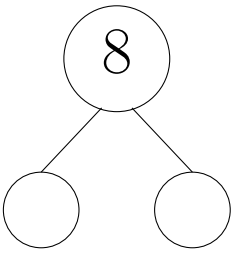


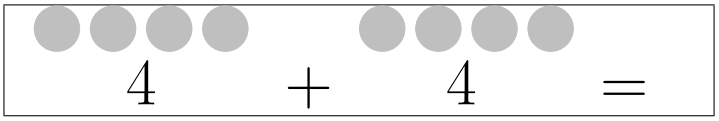


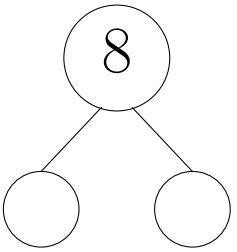






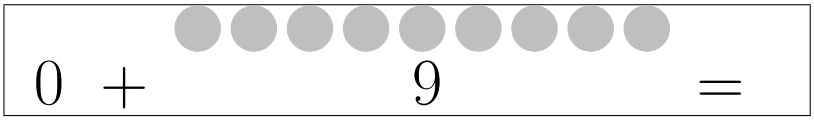


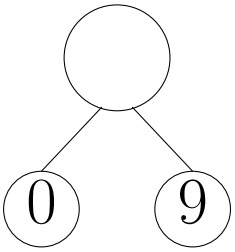


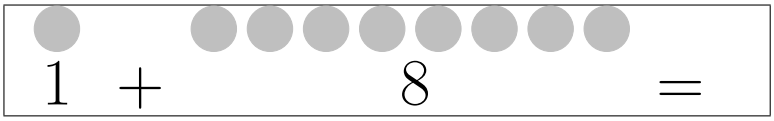


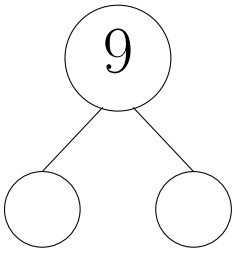
$8 = 8 +$	$8 = 7 +$	$8 = 6 +$
$8 = 5 +$	$8 = 4 +$	$8 = 3 +$

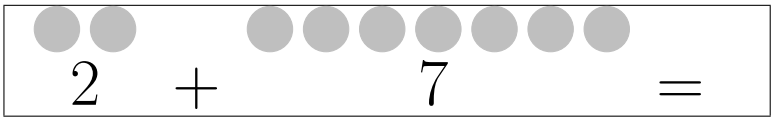
Exercise 81. *Complete*

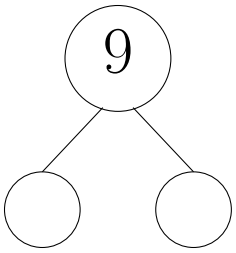


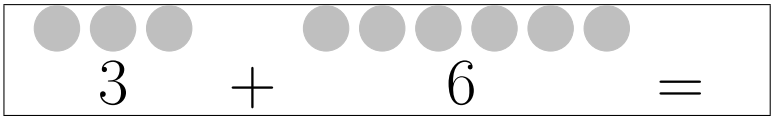


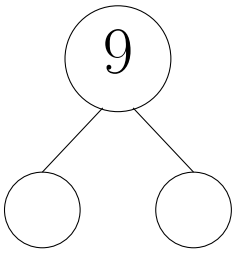


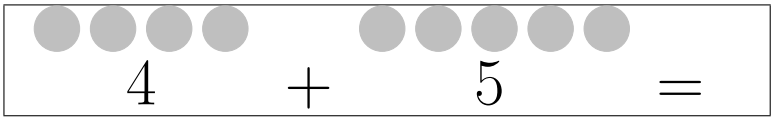


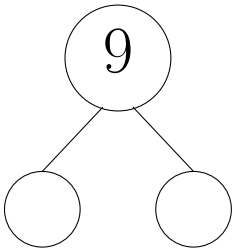








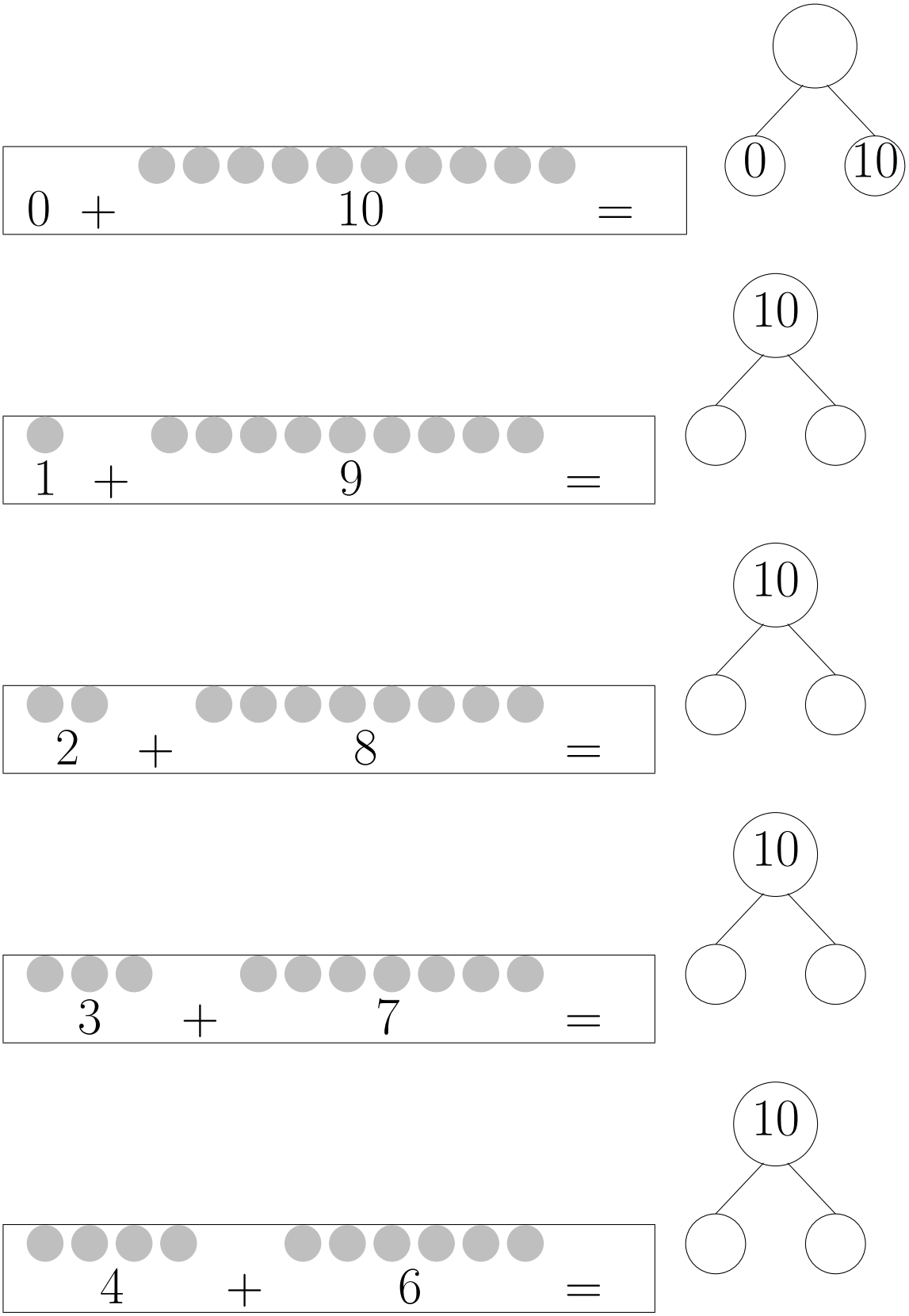


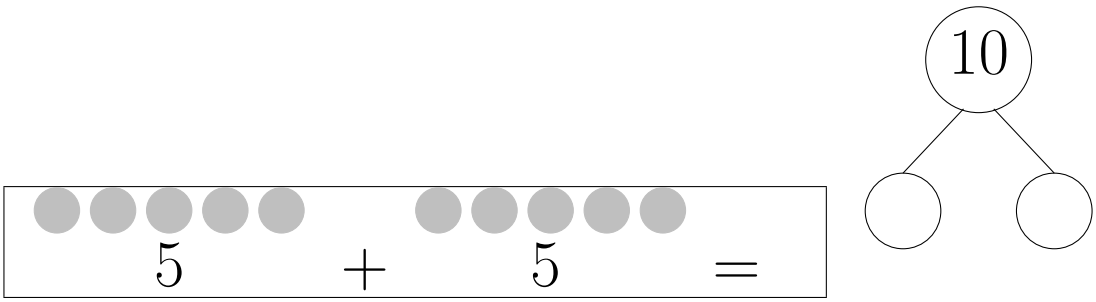


$9 = 9 +$ $9 = 8 +$ $9 = 7 +$

$9 = 6 +$ $9 = 5 +$ $9 = 4 +$

Exercise 82. *Complete*





$10 = 10 +$ $10 = 9 +$ $10 = 8 +$

$10 = 7 +$ $10 = 6 +$ $10 = 5 +$

$10 = 4 +$ $10 = 3 +$ $10 = 2 +$

$10 = 1 +$ $10 = 0 +$ $10 = \quad + 5$

Exercise 83. *Add*

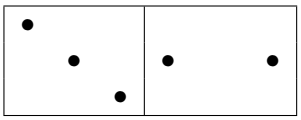
$2 + 2 =$ $5 + 5 =$ $1 + 1 =$

$9 + 1 =$ $8 + 2 =$ $7 + 3 =$

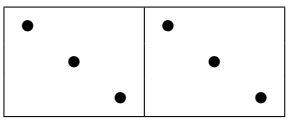
$5 + 1 =$ $5 + 2 =$ $5 + 3 =$

$6 + 4 =$ $6 + 3 =$ $6 + 2 =$

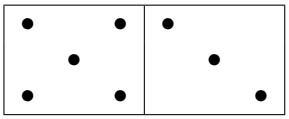
Exercise 84. *Write the addition sentences.*



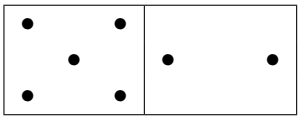
$3 + 2 =$



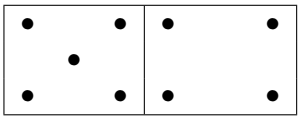
$+ \quad =$



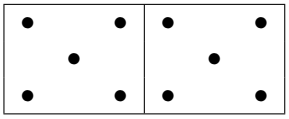
$+ \quad =$



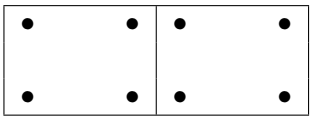
$+ \quad =$



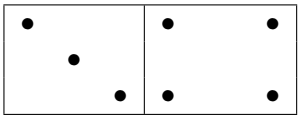
$+ \quad =$



$+ \quad =$



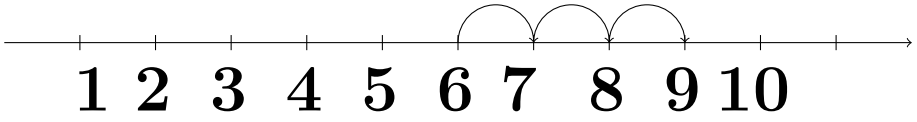
$+ \quad =$



$+ \quad =$

Calcul whith line numbers

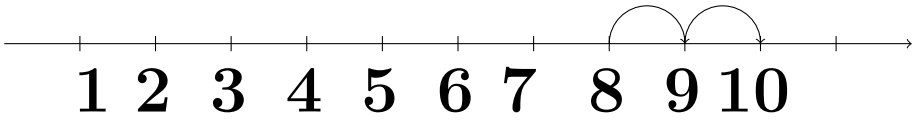
- $6 + 3 = ?$



So $6 + 3 = 9$

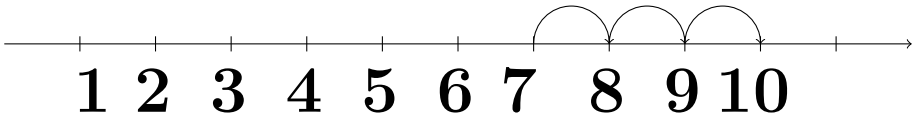
Exercise 85. *Calculate the sum with line numbers.*

- $8 + 2 = ?$



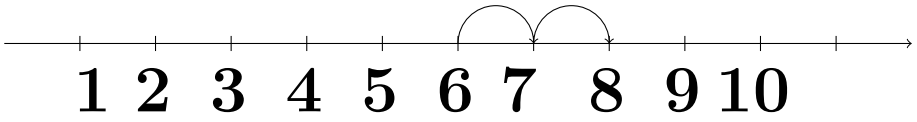
So $8 + 2 =$

- $7 + 3 = ?$



So $7 + 3 =$

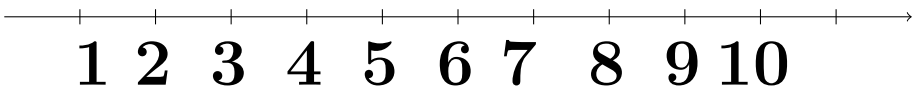
- $6 + 3 = ?$



So $6 + 2 =$

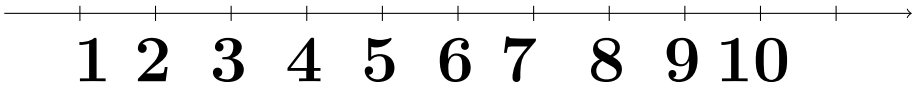
Exercise 86. *Calculate the sum with line numbers.*

- $5 + 2 = ?$



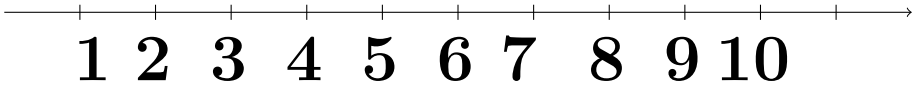
So $5 + 2 =$

- $5 + 1 = ?$



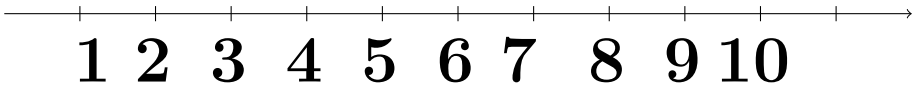
So $5 + 1 =$

- $5 + 3 = ?$



So $5 + 3 =$

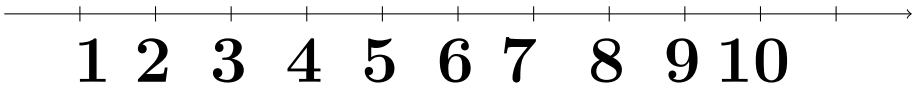
- $5 + 4 = ?$



So $5 + 4 =$

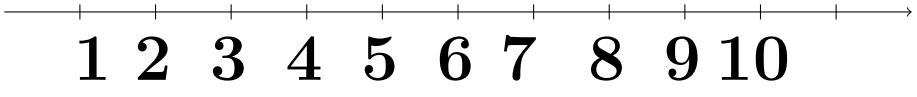
Exercise 87. *Calculate the sum with line numbers.*

- $6 + 4 = ?$



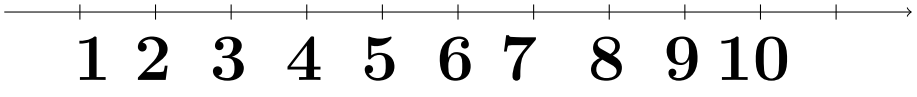
So $6 + 4 =$

- $8 + 1 = ?$



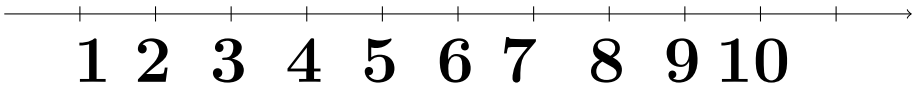
So $8 + 1 =$

- $3 + 3 = ?$



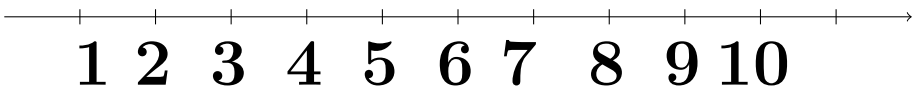
So $3 + 3 =$

- $7 + 2 = ?$



So $7 + 2 =$

- $4 + 3 = ?$



So $4 + 3 =$

Mental calcul.

- $6 + 3 = ?$

I make 6 in my minde,

I tell the three next numbers,

so the sum is the third number.

$7 \rightarrow 8 \rightarrow 9.$ So $6 + 3 = 9$

- $2 + 8 = ?$

I make 8 in my minde,

I tell the two next numbers,

so the sum is the second number.

$9 \rightarrow 10.$ So $2 + 8 = 10$

Exercise 88. *Add.*

$6 + 2 =$	$7 + 3 =$
$5 + 4 =$	$5 + 2 =$
$4 + 6 =$	$0 + 7 =$

Exercise 89. *Add.*

$2 + 2 =$

$3 + 3 =$

$7 + 3 =$

$4 + 4 =$

$5 + 5 =$

$1 + 2 =$

Exercise 90. *Complete .*

$\quad + 3 = 6$

$\quad + 4 = 8$

$\quad + 2 = 4$

$\quad + 5 = 10$

$\quad + 1 = 2$

$\quad + 5 = 7$

$\quad + 3 = 10$

$\quad + 5 = 8$

$\quad + 6 = 7$

$\quad + 8 = 9$

$\quad + 8 = 10$

$\quad + 6 = 9$

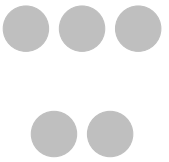
$\quad + 3 = 5$

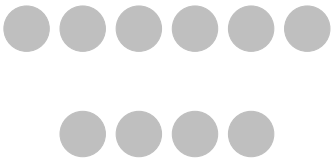
$\quad + 5 = 5$

$\quad + 1 = 5$

$\quad + 1 = 9$

Vertical addition.

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

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

Exercise 91. *Add.*

$$\begin{array}{r} 2 \\ +\ 2 \\ \hline = \end{array}$$

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

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

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

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

$$\begin{array}{r} 4 \\ +\ 2 \\ \hline = \end{array}$$

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

$$\begin{array}{r} 3 \\ +\ 6 \\ \hline = \end{array}$$

$$\begin{array}{r} 4 \\ +\ 1 \\ \hline = \end{array}$$

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

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

$$\begin{array}{r} 8 \\ +\ 2 \\ \hline = \end{array}$$

Exercise 92. *Complete the missing numbers.*

+	1	2	3	4	5	6	7	8	9
1				5					

Exercise 93. *Complete the missing numbers.*

+	1	2	3	4	5	6	7	8
2			5					

Exercise 94. *Complete the missing numbers.*

+	1	2	3	4	5	6	7
3			6				

Exercise 95. *Complete the missing numbers.*

+	1	2	3	4	5	6
4			7			

Exercise 96. *Complete the missing numbers.*

+	1	2	3	4	5
5			8		

Exercise 97. *Complete the missing numbers.*

+	1	2	3	4	5
1					
2					
3					
4		6			
5					

Exercise 98. *Complete the missing numbers.*

+	1	2	3	4	5	6
1						
2			5			
3						
4						

Exercise 99. *Complete the missing numbers.*

+	1	2	3	4	5	6	7
1							
2			5				
3							

Exercise 100. *Draw dots or circles to complete each addition sentence.*

$3 + 2 =$

$4 + 1 =$

$3 + 3 =$

$4 + 2 =$

$5 + 2 =$

$4 + 3 =$

Exercise 101. *Draw circles to complete each addition sentence and give the number bond.*

$6 + 2 =$

$1 + 7 =$

$5 + 4 =$

$6 + 3 =$

$7 + 2 =$

$1 + 8 =$

Exercise 102. *Draw dots to complete each addition sentence and give the number bond.*

$5 + 5 =$

$6 + 4 =$

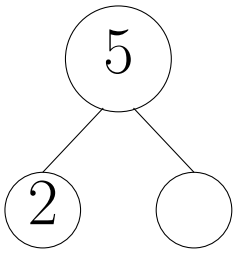
$7 + 3 =$

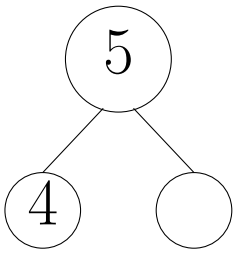
$2 + 8 =$

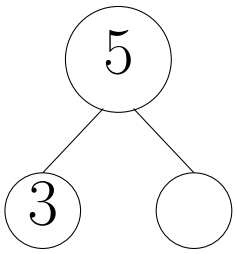
$1 + 9 =$

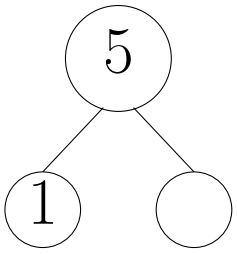
$4 + 4 =$

Exercise 103. *Draw dots or circles to complete each number bond and give the addition sentense.*

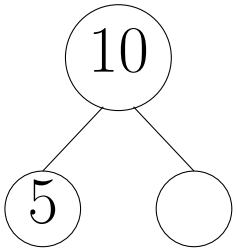


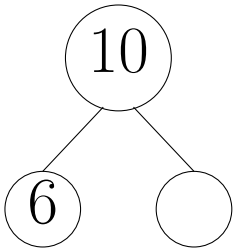


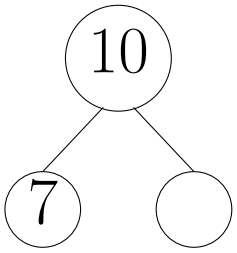


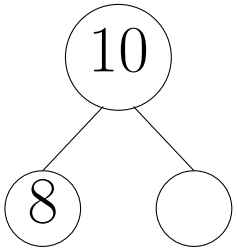


Exercise 104. *Draw circles to complete each number bond and give the addition sentense.*

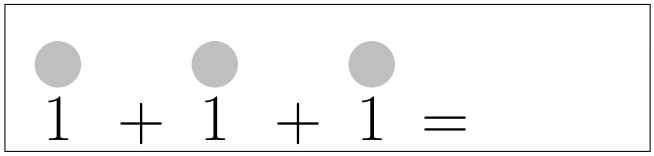


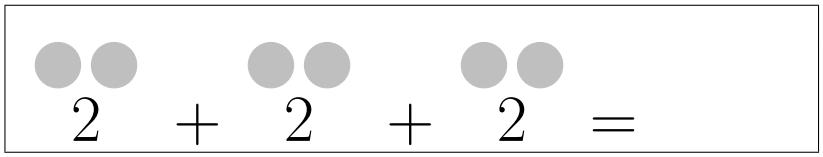


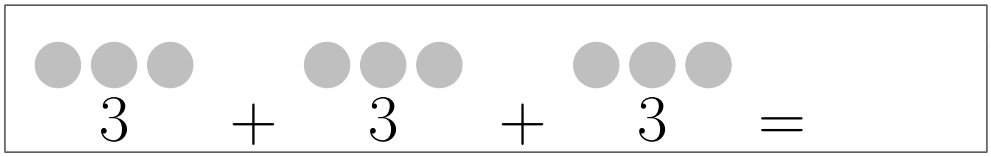


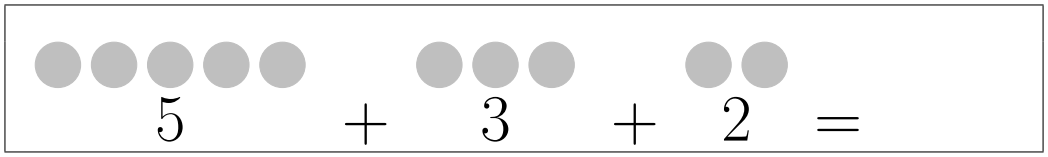


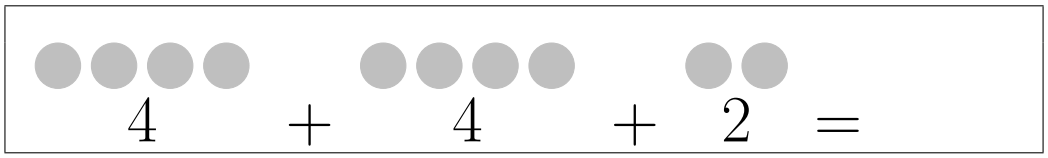
Exercise 105. *Add.*

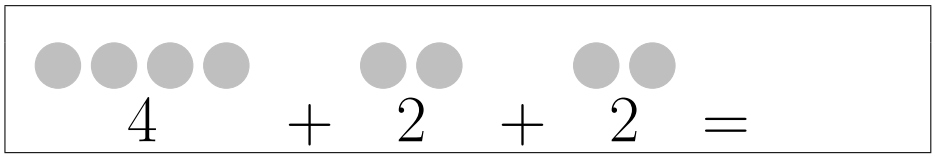


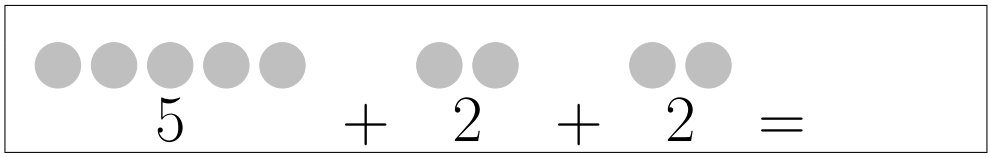












Exercise 106. *Sum up. You can represent the sum with dots or circles.*

$2 + 2 + 1 =$

$7 + 2 + 1 =$

$5 + 2 + 1 =$

$2 + 1 + 1 =$

$2 + 2 + 2 =$

$3 + 3 + 3 =$

$3 + 3 + 1 =$

$2 + 3 + 5 =$

$4 + 2 + 4 =$

$2 + 2 + 2 + 2 =$

$4 + 2 + 2 =$

Exercise 107. *Write the missing numbers. You can represent the sum with dots or circles.*

$\square + 2 + 2 = 6$

$5 + 2 + \square = 8$

$3 + \square + 3 = 9$

$2 + 2 + 2 + \square = 8$

$2 + 2 + 2 + 2 + \square = 10$

$4 + 4 + \square = 8$

$4 + 4 + \square = 10$

$2 + 2 + \square = 7$

$2 + 2 + \square = 8$

$2 + 2 + 2 + \square = 10$

Exercise 108. *Circle each boxe that total 10.*

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

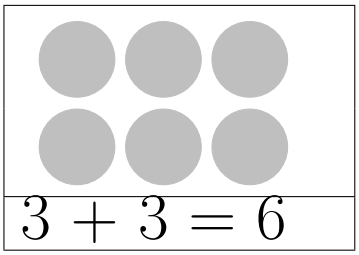
Exercise 109. *Fill in the missing box and find the total for each expression.*

$4+1=$	$4+2=$
$5+1=$	
	$6+2=$
$7+1=$	
$8+1=$	$8+2=$

2.6 Doubles and doubles plus 1

We add the same number two times

$3 + 3 = 6$



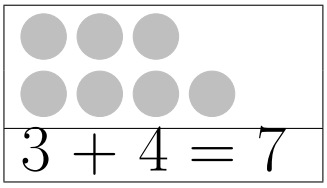
$3 + 3 = 6$

a doubles

6 is even number

We add a number and the next

$3 + 4 = 7$



$3 + 4 = 7$

a doubles plus 1

7 is odd number

Exercise 110. *Add. Color doubles red. Color doubles plus 1 green.*

$0 + 0 =$	$0 + 1 =$	$1 + 1 =$
$1 + 2 =$	$2 + 2 =$	$2 + 3 =$
$3 + 3 =$	$3 + 4 =$	$4 + 4 =$
$4 + 5 =$	$5 + 5 =$	$4 + 6 =$

Exercise 111. *Complete the number sentences. Draw circles or dots to chow doubles.*

$1 + 1 =$

$2 + 2 =$

$3 + 3 =$

$4 + 4 =$

$5 + 5 =$

Exercise 112. *Complete the number sentences. Draw circles or dots to chow doubles plus 1.*

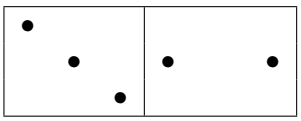
$1 + 2 =$

$2 + 3 =$

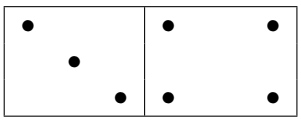
$3 + 4 =$

$4 + 5 =$

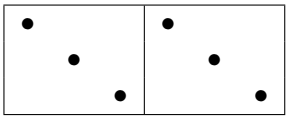
Exercise 113. *Fill in the blancks whith even or odd.*



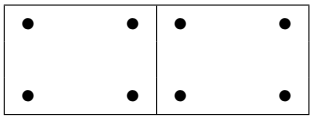
5 is an ..... number



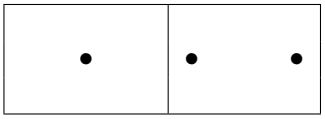
7 is an ..... number



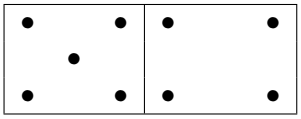
6 is an ..... number



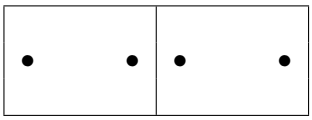
8 is an ..... number



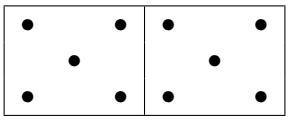
3 is an ..... number



9 is an ..... number



4 is an ..... number



10 is an ..... number

2.7 Pattern

Exercise 114. *Complete the patterns.*

5	5	10	5	5	10						

6	4	10									

4	6	10									

7	3	10									

3	7	10									

8	2	10									

2	8	10									

9	1	10									

1	9	10									

Exercise 115. *Complete the pattern.*

1	1	2	1	1	2						

2	2	4									

3	3	6									

4	4	8									

5	4	9									

4	3	7									

5	3	8									

5	2	7									

6	3	9									

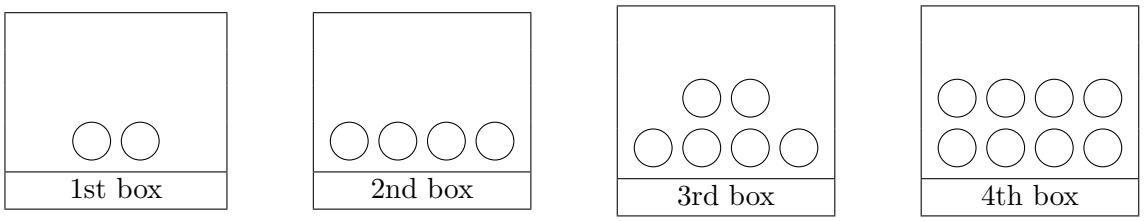
Exercise 116.

In the first box there are two white balls.

In the second box there are two more white balls than the first box.

In the third box there are two more white balls than the second box.

In the fourth box there are two more white balls than the third box.

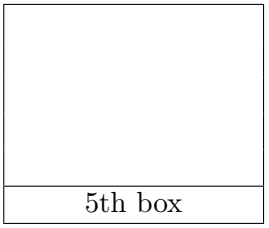


If the pattern continues,

how many balls will there be in fifth box?

.....

Draw balls in the fifth box



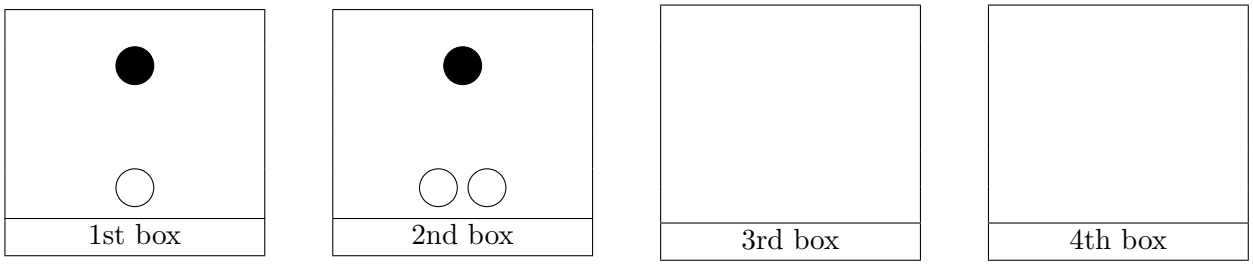
Exercise 117.

In the first box there are one white ball and one black ball.

In the second box there are one more white ball than the first box.

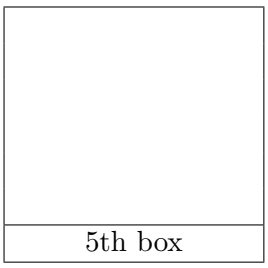
In the third box there are one more white ball than the second box.

In the fourth box there are one more white ball than the third box.



Draw the balls in third box and in the fourth box.

If the pattern continues,
how many balls will there be in the fifth box?



How many white balls will there be in the sixth box?

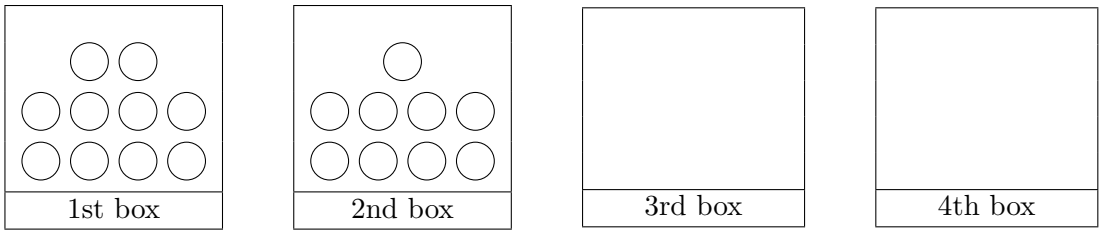
Exercise 118.

In the first box there are ten white balls.

In the second box there are one less white ball than the first box.

In the third box there are one less white ball than the second box.

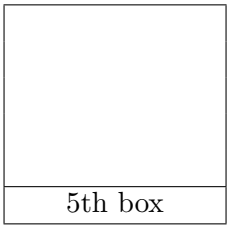
In the fourth box there are one less white ball than the third box.



Draw the balls in third box and in the fourth box.

If the pattern continues,

how many balls will there be in the fifth box?



How many balls will there be in the sixth box?

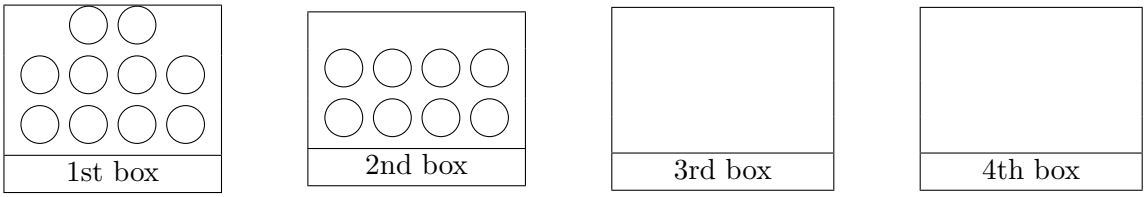
Exercise 119.

In the first box there are ten white balls.

In the second box there are two less white ball than the first box.

In the third box there are two less white ball than the second box.

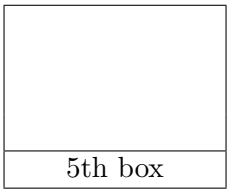
In the fourth box there are tow less white ball than the third box.



Draw the balls in third box and in the fourth box.

If the pattern continues,

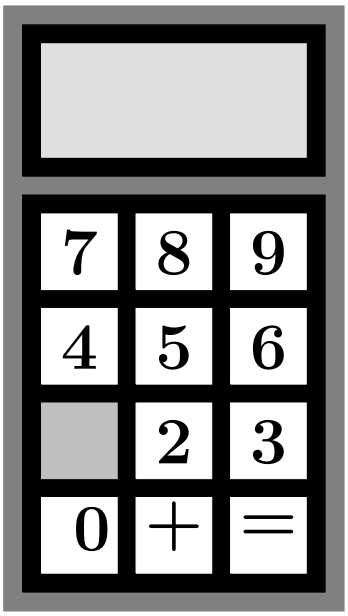
how many balls will there be in the fifth box?



How many balls will there be in the sixth box?

2.8 Words problems

Exercise 120.



Which key number is broken on the calculator?

.....

How we can make the number 10 appear on the screen without the 1 key ? (Give four possibilities)

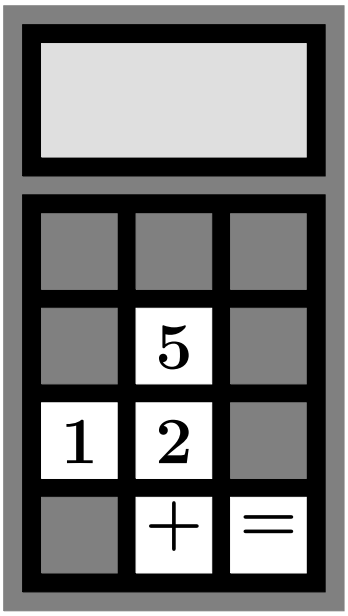
.....

.....

.....

.....

Exercise 121.



How many keys are broken on the calculator?

.....

Which keys numbers are broken ?

.....

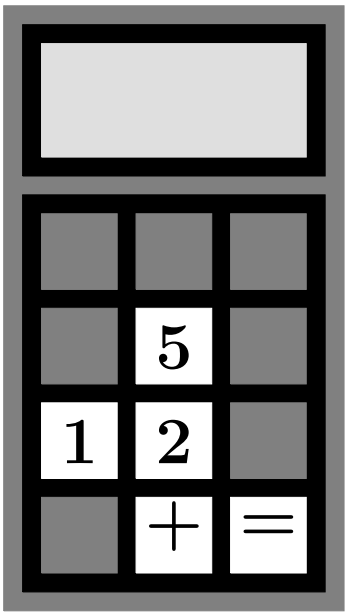
How we can make the number 8 appear on the screen without the 0 key, 3 key, 4 key, 6 key, 7 key, 8 key and 9 key ? (With minimal touch)

.....

How we can make the number 9 appear on the screen without the 0 key, 3 key, 4 key, 6 key, 7 key, 8 key and 9 key ? (With minimal touch)

.....

Exercise 122.



How we can make the number 4 appear on the screen of this calculator? (With minimal touch)

.....

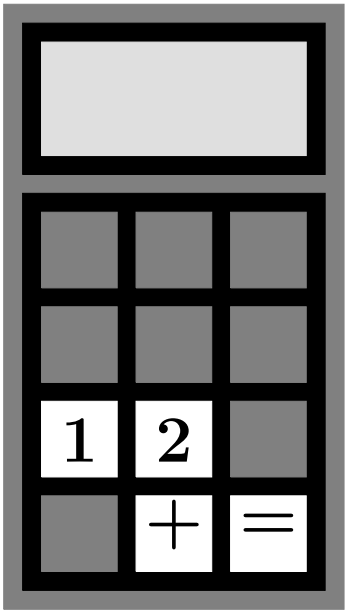
How we can make the number 7 appear on the screen of this calculator? (With minimal touch)

.....

How we can make the number 10 appear on the screen of this calculator? (With minimal touch)

.....

Exercise 123.



How we can make the number 6 appear on the screen of this calculator? (With minimal touch)

.....

How we can make the number 8 appear on the screen of this calculator? (With minimal touch)

.....

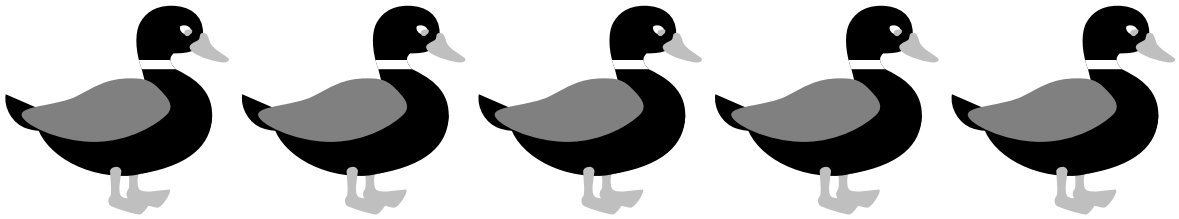
How we can make the number 9 appear on the screen of this calculator? (With minimal touch)

.....

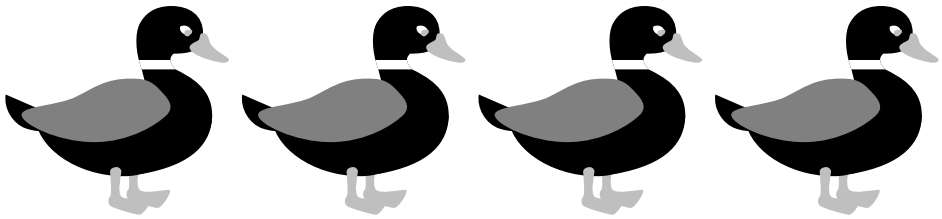
How we can make the number 10 appear on the screen of this calculator? (With minimal touch)

.....

Exercise 124.



5 ducks in the lake.



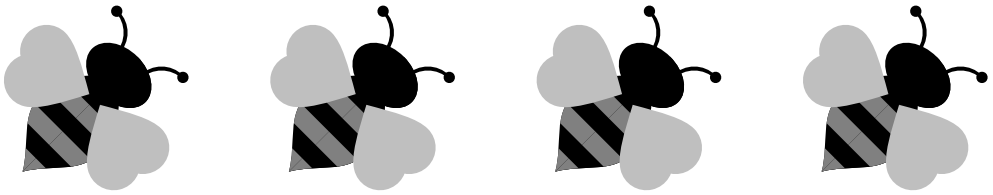
4 ducks arrive at the lake.

How many ducks are there?

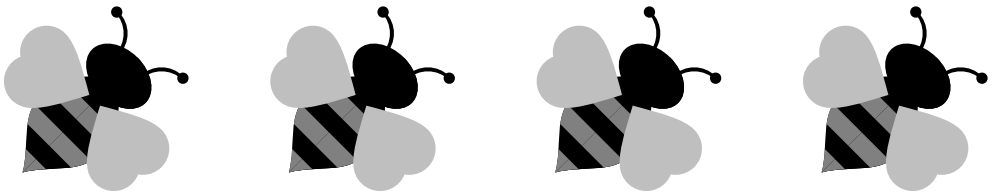
.....

Make the number bond and draw circles or dots to much the story.

Exercise 125.



There 4 bees in garden.



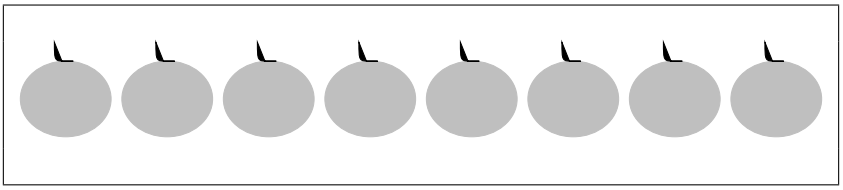
4 bees arrive at garden.

How many bees are there?

.....

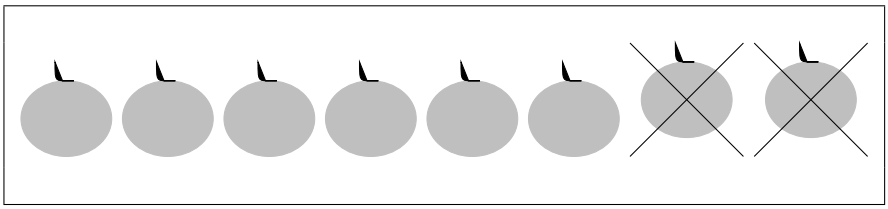
Make the number bond and draw circles or dots to much the story.

2.9 Subtraction



I have 8 apples. I eat 2 apples.

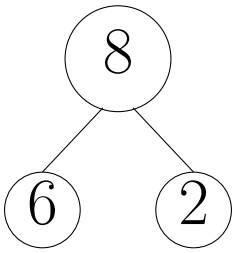
How many apples left?

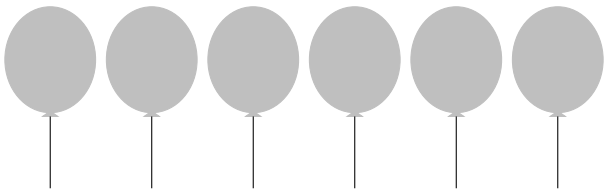


6 apples left.

$$\text{So } 8 - 2 = 6$$

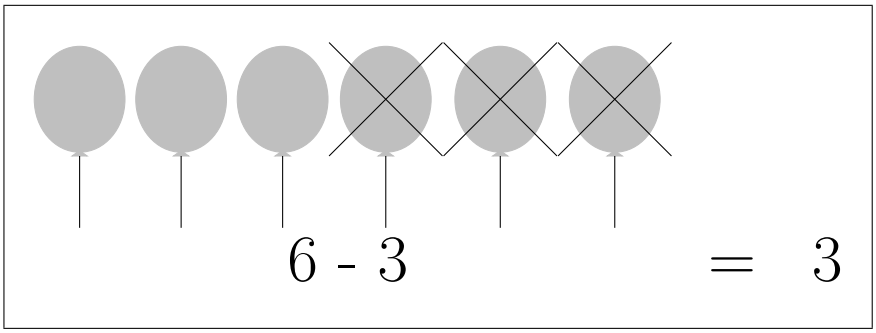
The number bond:





I have 6 balloons. 3 balloon brust.

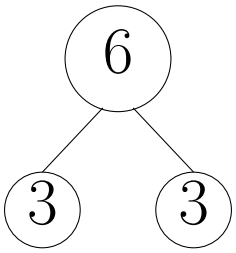
How many balloons left?



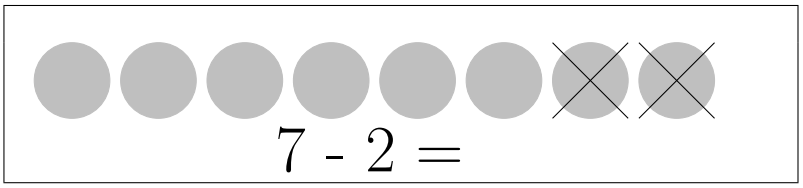
3 balloon left.

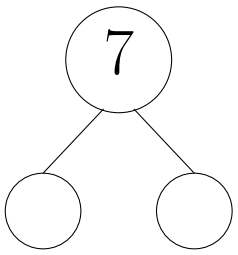
So 6 - 3 = 3

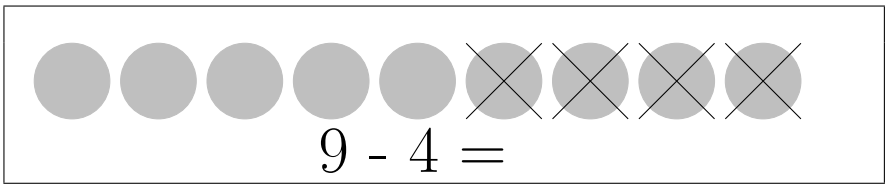
The number bond:

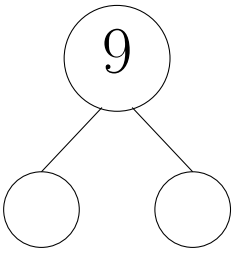


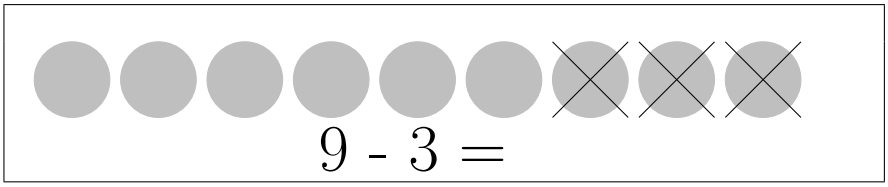
Exercise 126. *Finde the difference and complete the number bond.*

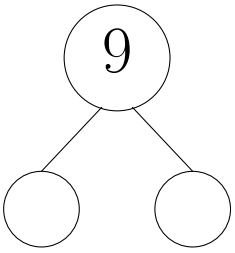


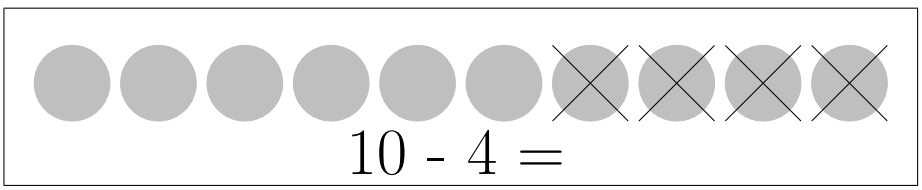


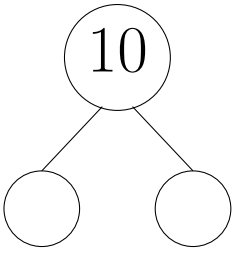




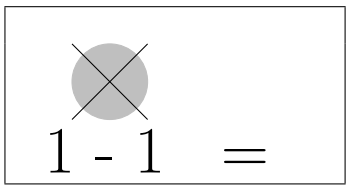


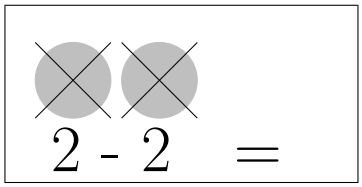


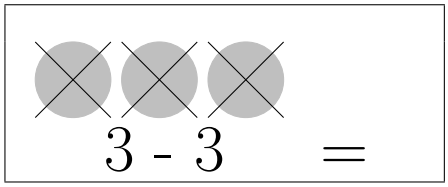


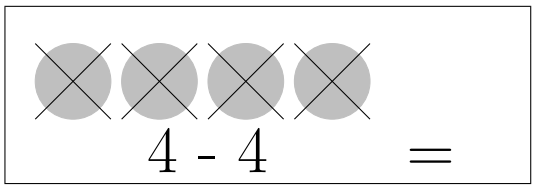


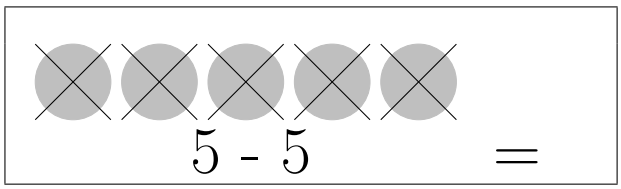
Exercise 127. *Finde the difference.*



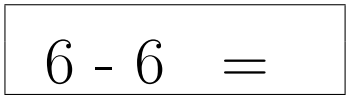


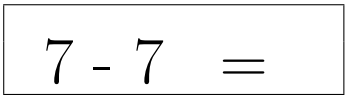


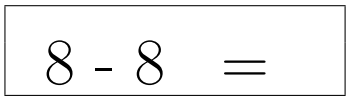


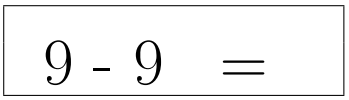


When we substract a number from itself we get zero : $10 - 10 = 0$

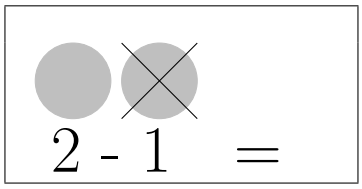


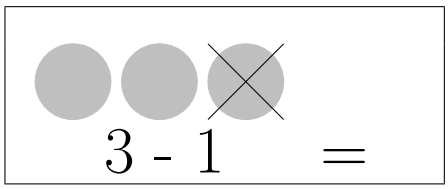


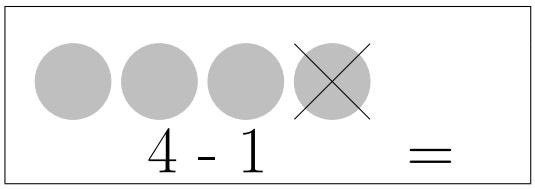


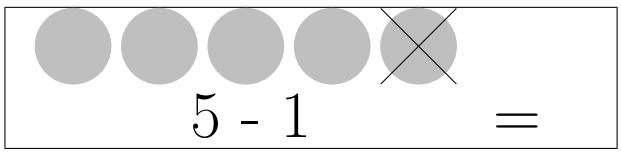


Exercise 128. *Finde the difference.*

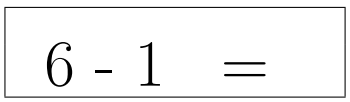


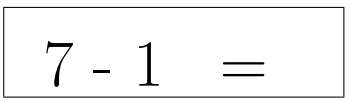


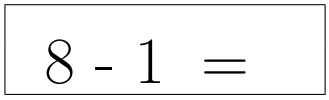


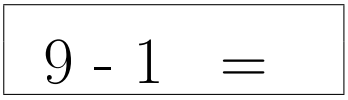


When we substract 1 from a number we get the predecessor of this number : 10 - 1 = 9

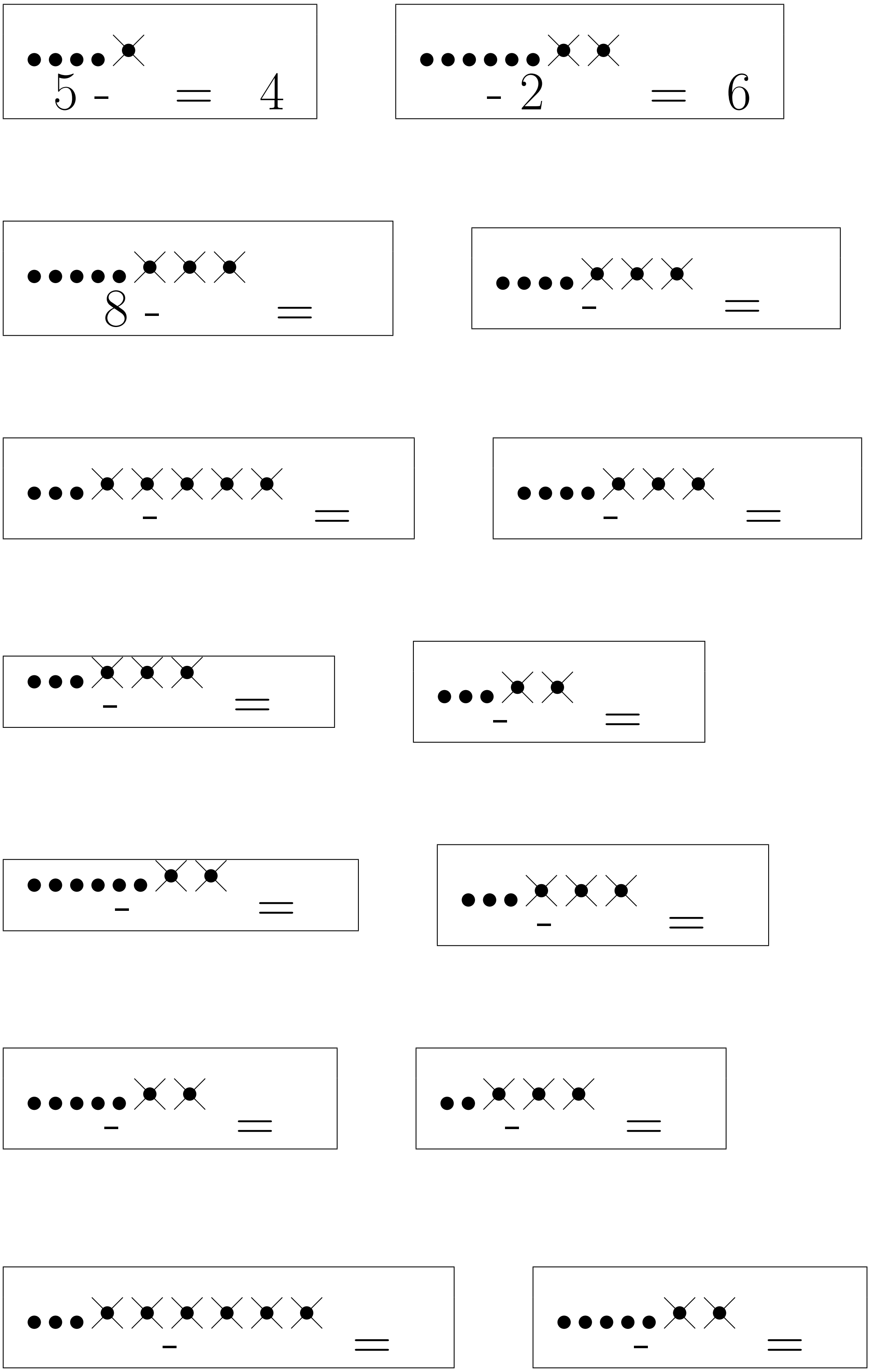




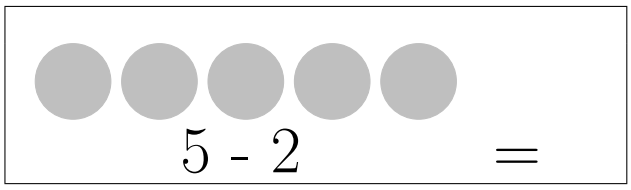


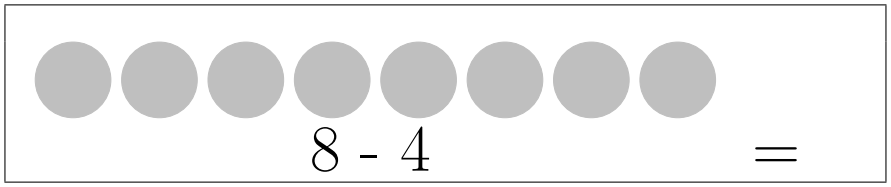


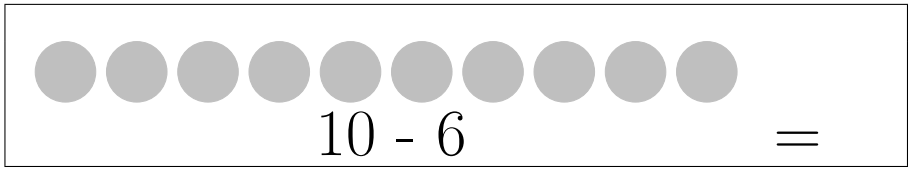
Exercise 129. *Finde the numbers missing*

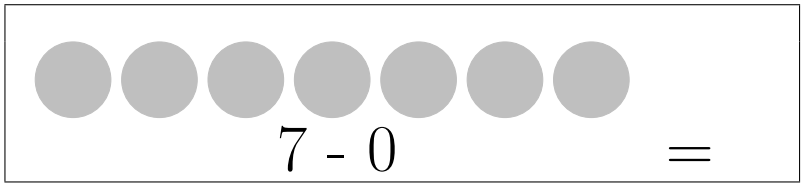


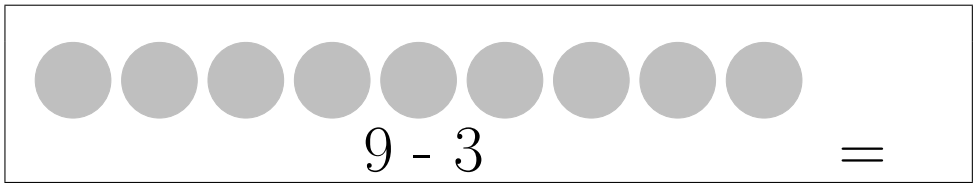
Exercise 130. *Cross off the circles and find the difference*

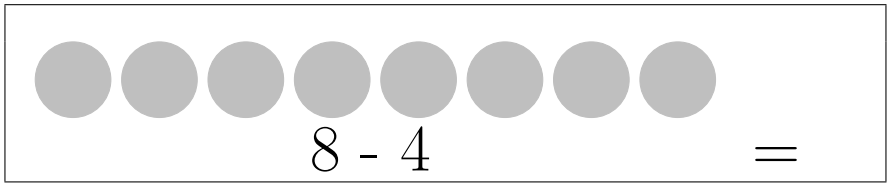




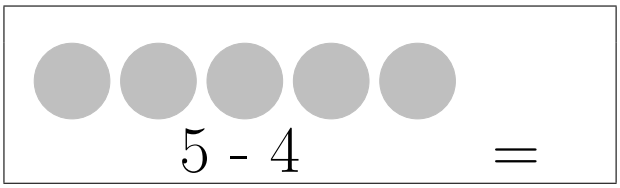


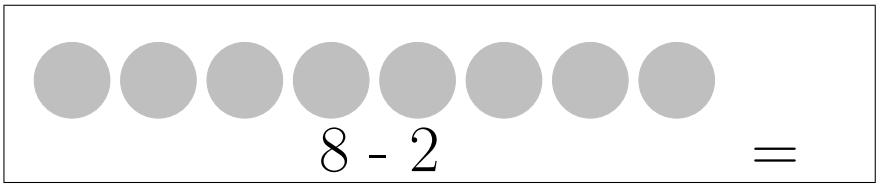


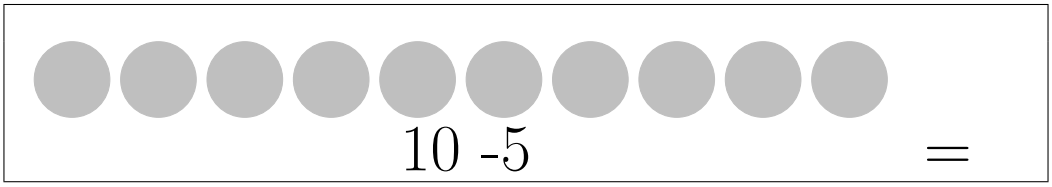


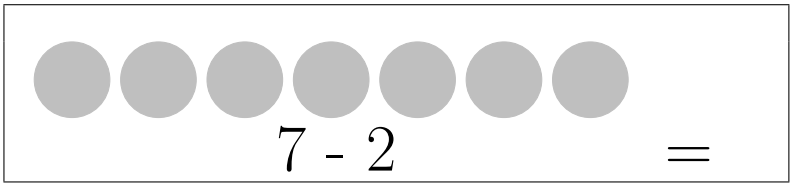


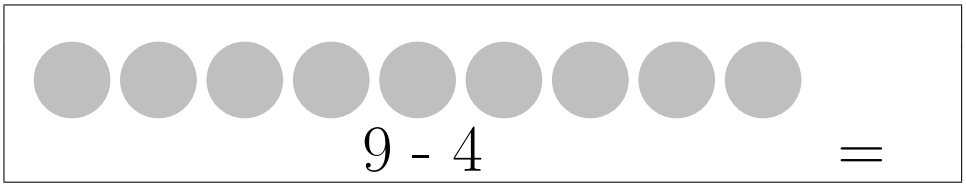
Exercise 131. *Cross off the circles and find the difference*

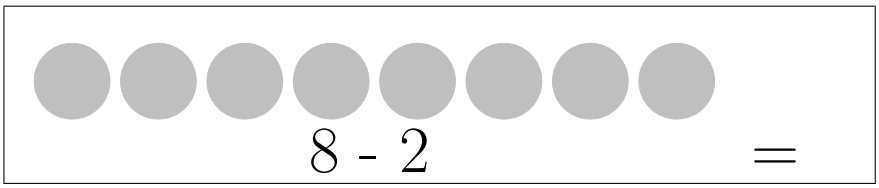




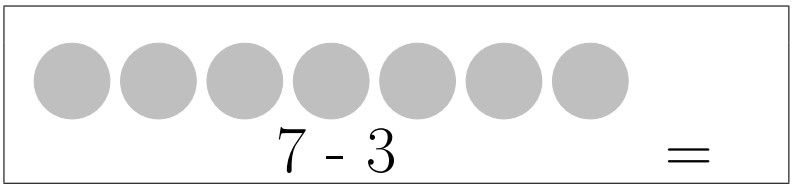


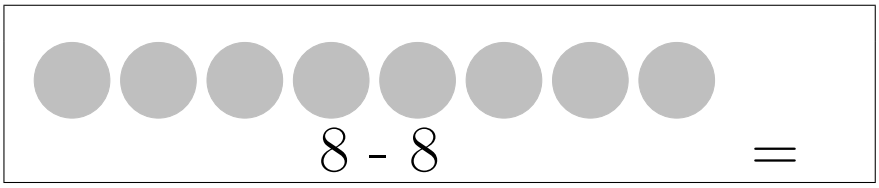


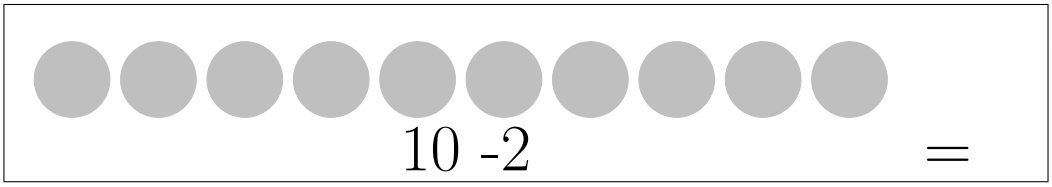


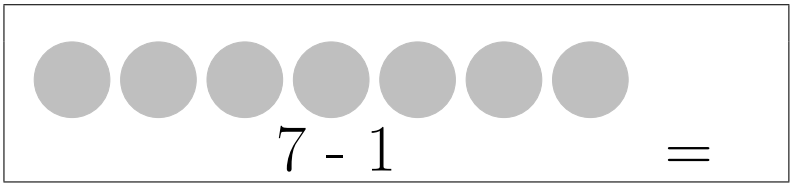


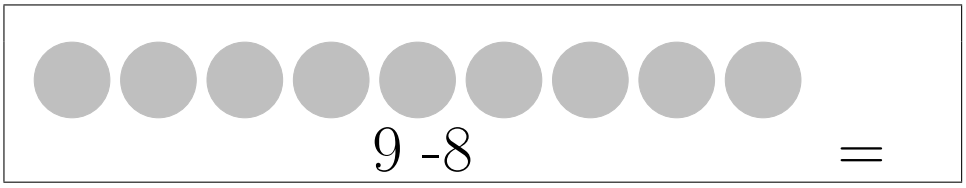
Exercise 132. *Cross off the circles and find the difference*

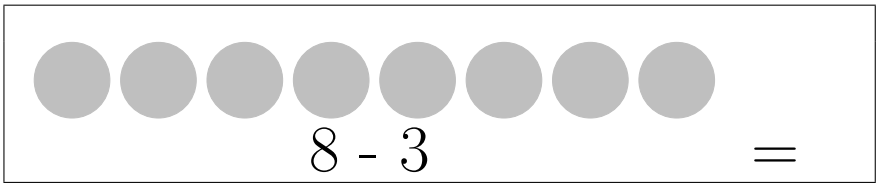












Exercise 133. *Draw dots or circles and cross to complete each substraction sentence.*

3 - 2 =

4 - 1 =

3 - 3 =

4 - 2 =

5 - 2 =

4 - 3 =

4 - 4 =

5 - 3 =

6 - 2 =

7 - 1 =

Exercise 134. *Draw dots or circles and cross to complete each substraction sentence.*

$8 - 4 =$

$9 - 3 =$

$9 - 5 =$

$10 - 5 =$

$10 - 7 =$

$10 - 4 =$

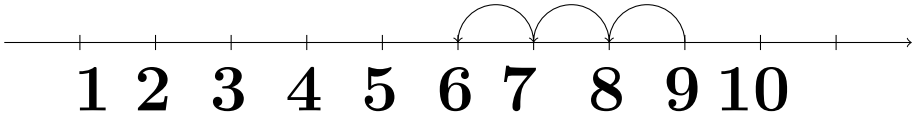
$7 - 3 =$

$8 - 2 =$

$9 - 2 =$

Calcul whith line numbers

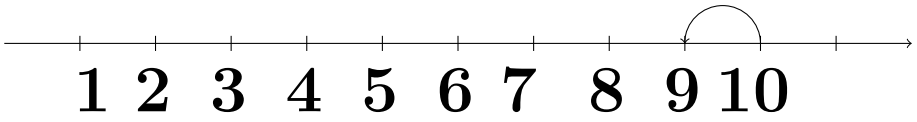
- 9 - 3 = ?



So 9 - 3 = 6

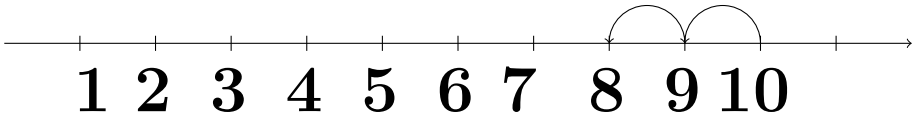
Exercise 135. *Calculate the difference with line numbers.*

- 10 - 1 = ?



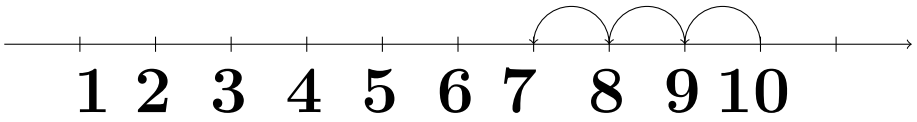
So 10 - 1 = ..

- 10 - 2 = ?



So 10 - 2 = ..

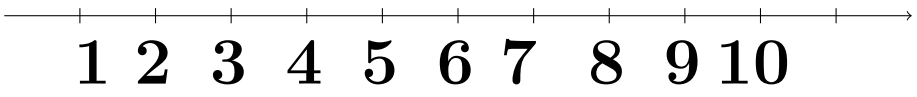
- 10 - 3 = ?



So 10 - 3 = ..

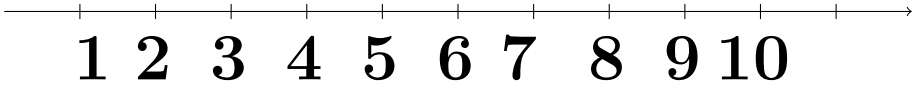
Exercise 136. *Calculate the difference with line numbers.*

- 5 - 1 = ?



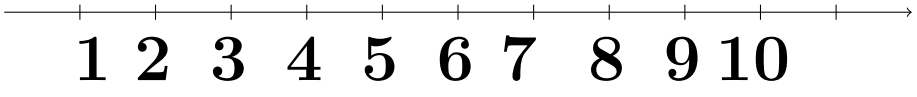
So 5 - 1 =

- 5 - 2 = ?



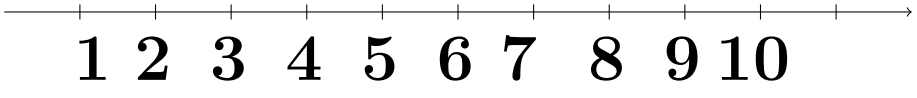
So 5 - 2 =

- 5 - 3 = ?



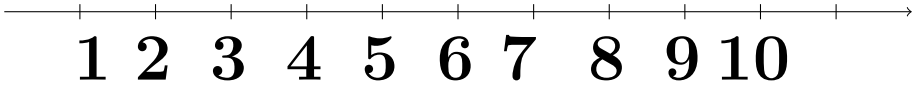
So 5 - 3 =

- 5 - 4 = ?



So 5 - 4 =

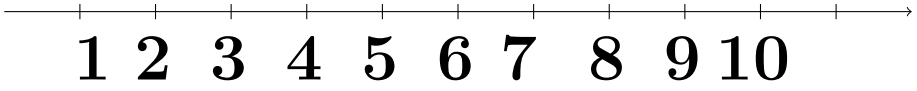
- 6 - 5=?



So 6 - 5 =

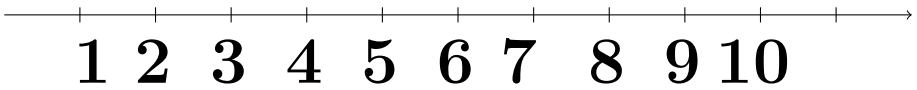
Exercise 137. *Calculate the difference with line numbers.*

- 7 - 2 = ?



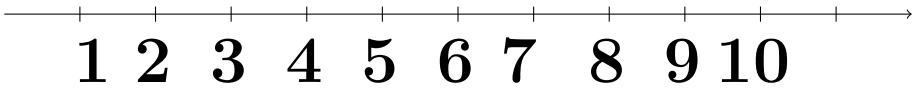
So 7 - 2 =

- 8 - 3 = ?



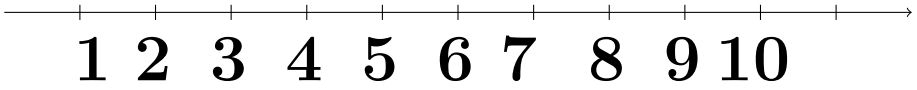
So 8 - 3 =

- 10 - 6 = ?



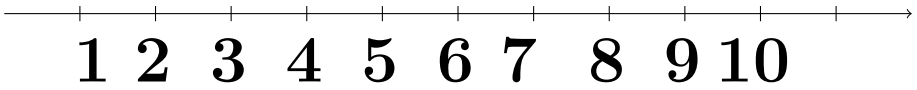
So 10 - 6 =

- 7 - 2 = ?



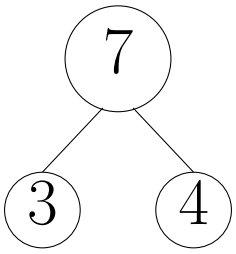
So 7 - 2 =

- 10 - 5 = ?

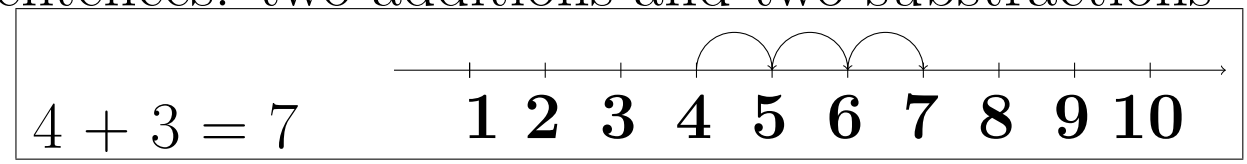


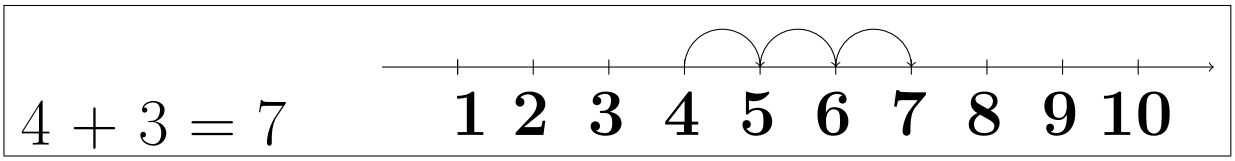
So 10 - 5 =

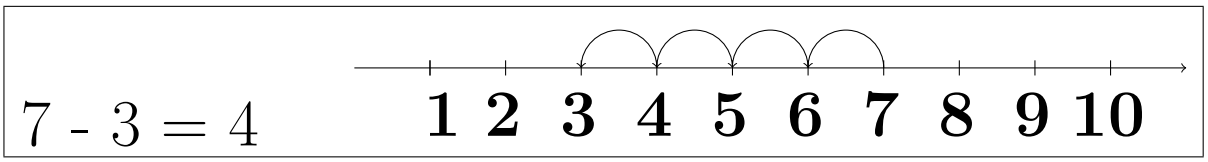
2.10 Addition and substraction are inverse operations.

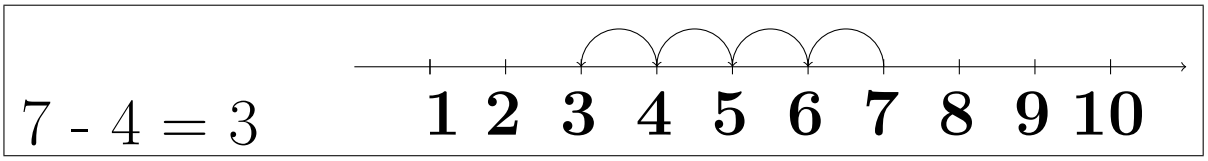


Whith this number bond we can make 4 math sentences: two additions and two substractions





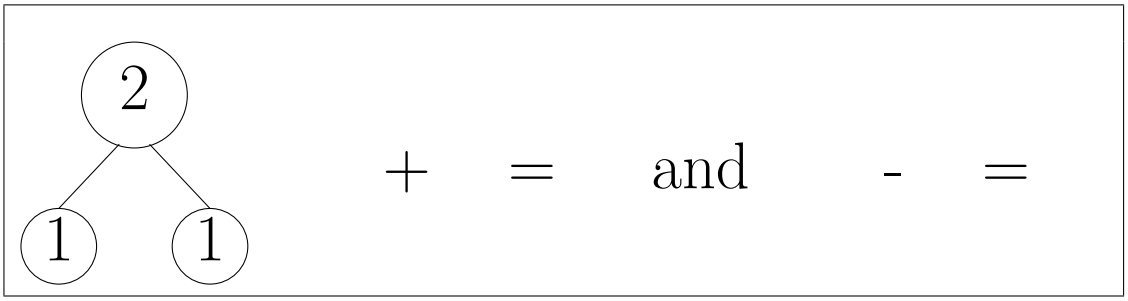


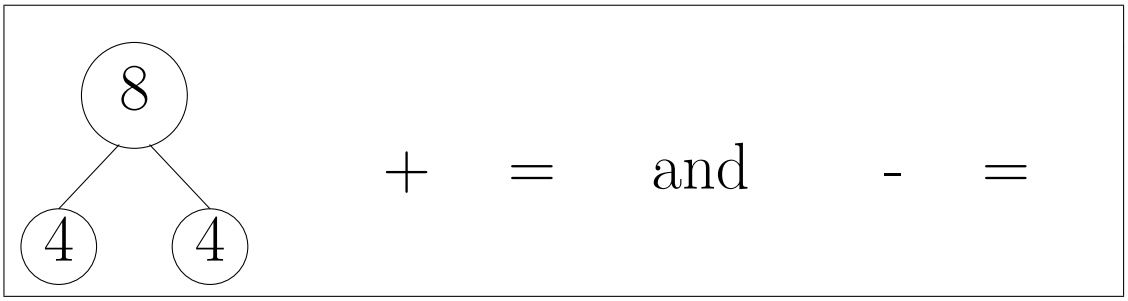


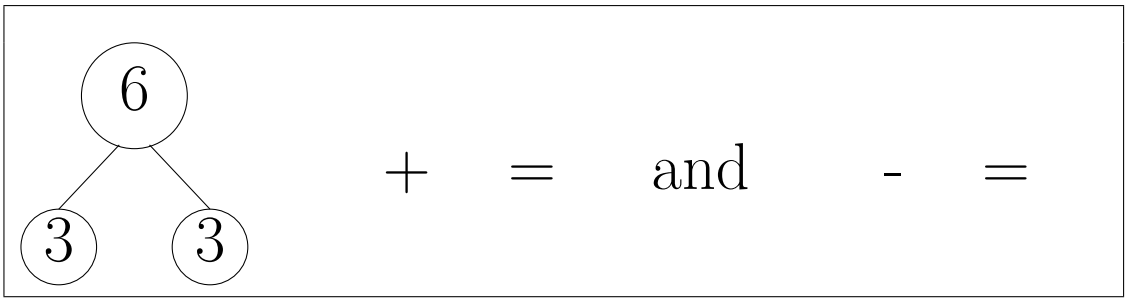
Exercise 138. *Complete.*

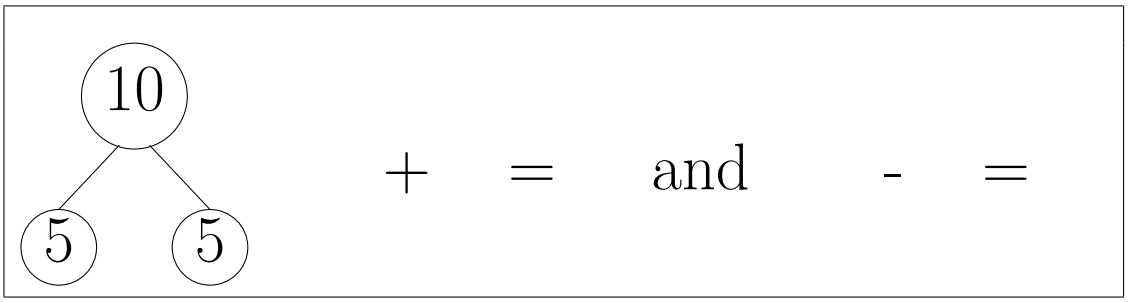
- We have 7 + 2 = 9 so 9 - 7 = ..
- We have 5 + .. = 8 so 8 - 5 = ..
- We have 4 + .. = 6 so 6 - 4 = ..
- We have 9 + .. = 10 so 10 - 9 = ..

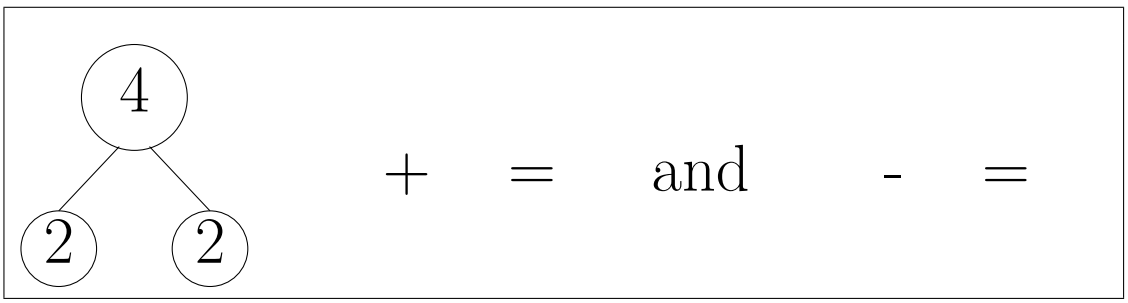
Exercise 139. *Complete the math sentences from the number bond.*











Exercise 140. *Complet the missing number.*

$10 + 0 = 10$ so $10 - 0 =$

$9 + 1 = 10$ so $10 - 9 =$

$8 + 2 = 10$ so $10 - 2 =$

$4 + 6 = 10$ so $10 - 4 =$

$3 + 7 = 10$ so $10 - 3 =$

$3 + 4 = 7$ so $7 - 3 =$

$6 + 3 = 9$ so $9 - 3 =$

$2 + 7 = 9$ so $9 - 7 =$

$1 + 7 = 8$ so $8 - 7 =$

Exercise 141. *Complet the missing number.*

$6 + 3 = 9$ so $9 - 6 =$ and $9 - 3 =$

$5 + 4 = 9$ so $9 - 5 =$ and $9 - 4 =$

$7 + 2 = 9$ so $9 - 2 =$ and $9 - 7 =$

$1 + 8 = 9$ so $9 - 1 =$ and $9 - 8 =$

$0 + 9 = 9$ so $9 - 9 =$ and $9 - 0 =$

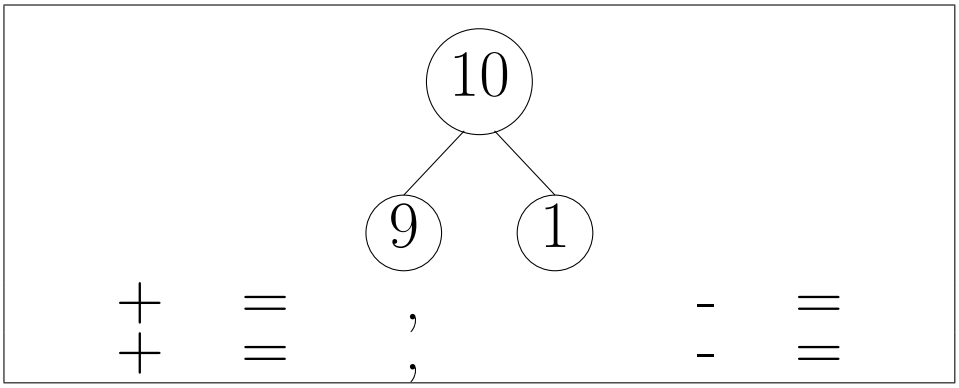
$5 + 3 = 8$ so $8 - 5 =$ and $8 - 3 =$

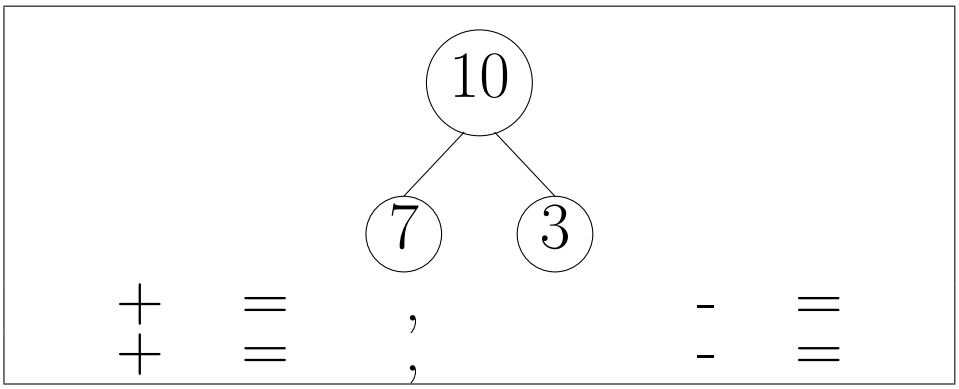
$6 + 2 = 8$ so $8 - 6 =$ and $8 - 2 =$

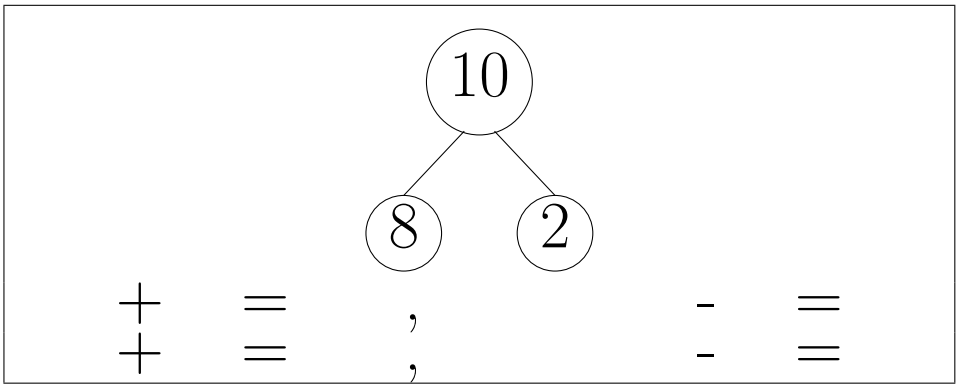
$5 + 2 = 7$ so $7 - 2 =$ and $7 - 5 =$

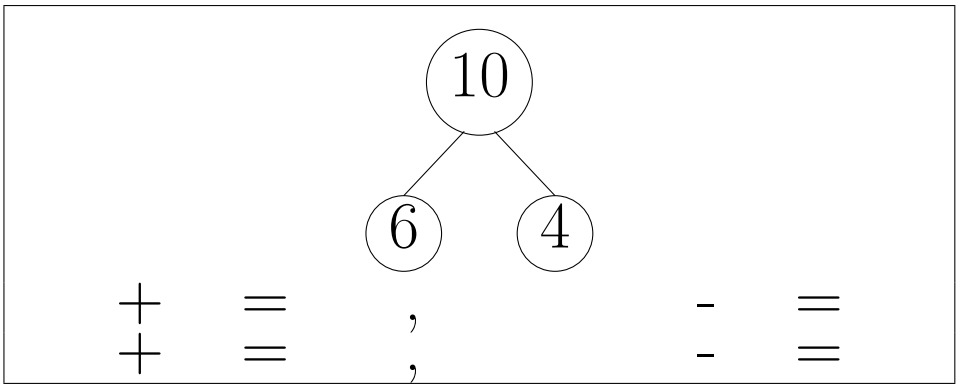
$3 + 4 = 7$ so $7 - 3 =$ and $7 - 4 =$

Exercise 142. *Write two addition sentences and two substraction sentences.*









2.11 Word problems

Exercise 143.

There are 10 childrens in a dance group, only 4 of them are boys.

(a) How many girls are there? Explain your thinking using a math drawing, numbers and words.

(b) Make the number bond.

(c) Write two substruction sentence to match the story.

(d) Write two addition sentence to match the story.

Exercise 144.

There are 10 birds on the tree, 7 of them fly away.

(a) How many birds stay on the tree? Explain your thinking using a math drawing, numbers and words.

(b) Make the number bond.

(c) Write two substruction sentence to match the story.

(d) Write two addition sentence to match the story.

Exercise 145.

Raul have 9 pens, 5 of them are browken, the others are good.

(a) How many good pens are there ? Explain your thinking using a math drawing numbers and words.

(b) Make the number bond.

(c) Write two substruction sentence to match the story.

(d) Write addition sentence to match the story.

Are there double or double plus 1 ?

Exercise 146.

We need 8 tomatoes to make our sauce for dinner. We have only 3 tomatoes.

(a) How many more tomatoes do we need ? Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond that shows the story.

(c) Write the addition sentence to match the story.

(d) Write the substruction sentence to match the story.

Exercise 147.

We need 10 eggs to make a cake.
We have only 7 eggs.
(a) How many more eggs do we need ?
Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond that shows the story.

(c) Write the addition sentence to match the story.

(d) Write the substruction sentence to match the story.

Exercise 148.

There are 7 birds on the tree.

Some more birds join them.
Now there are 10 bird on the tree.

(a) How many birds join them?

Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond to shows the story.

(c) Write the addition sentence and a substruction sentence to match the story.

....

Exercise 149.

There are 4 students in the classroom.

Some more students join them.
Now there are 9 students in the classroom.

(a) How many students join them?

Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond to shows the story.

(c) Write the addition sentence and a substruction sentence to match the story.

....

Exercise 150.

Jane confused about this sentence :

$$.. = 7 - 2$$

Write addition number sentence that might help her understand and solve it. Explain to Jane using words, pictures, or numbers, too.

Exercise 151.

Sam confused about this problem :

$$... = 10 - 3$$

Write addition number sentence that might help him understand and solve it. Explain to Sam using words, pictures, or numbers, too.

Chapter 3

Up to twenty

3.1 Numbers counted up to twenty

●●●●●●●●●●	10	ten
●●●●●●●●●●○	11	eleven
●●●●●●●●●●○○	12	twelve

𝍸	10	ten
𝍸 |	11	eleven
𝍸 | |	12	twelve

Exercise 152. *Trace the numbers using a pencil or pen.*

10 10 10 10 10 10

11 11 11 11 11 11

12 12 12 12 12 12

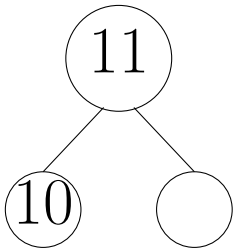
Exercise 153. *How many square?*

 There are ... squares.

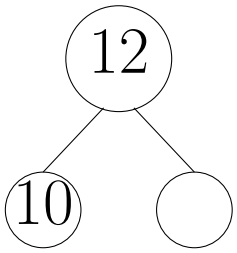
 There are ... squares.

 There are ... squares.

Exercise 154. *Complete and draw circles to explain.*



1 more than 10 is ...



2 more than 10 is ...

●●●●●●●●●●○○○	13	thirteen
●●●●●●●●●●○○○○	14	fourteen
●●●●●●●●●●○○○○○	15	fifteen

𝍸 | |	13	thirteen
𝍸 | | |	14	fourteen
𝍸 | | | |	15	fifteen

Exercise 155. *Trace the numbers using a pencil or pen.*

13 13 13 13 13 13

14 14 14 14 14 14

15 15 15 15 15 15

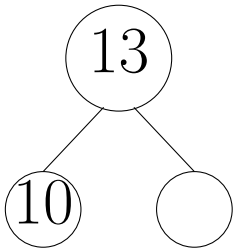
Exercise 156. *How many squares?*

There are ... squares.

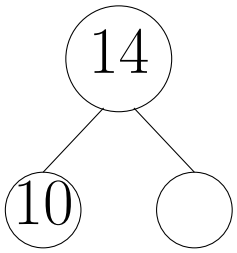
There are ... squares.

There are ... squares.

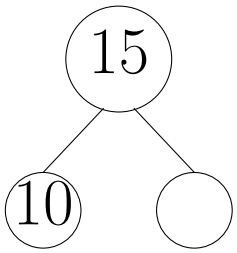
Exercise 157. *Complete and draw circles to explain.*



3 more than 10 is ...

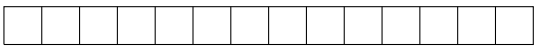


4 more than 10 is ...



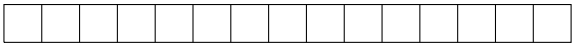
5 more than 10 is ...

Exercise 158. *Color 10 squares red. How many squares?*



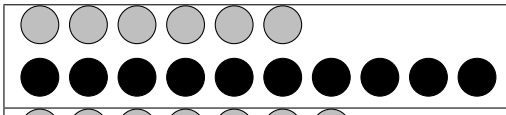
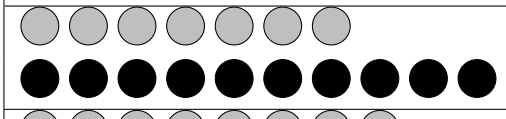
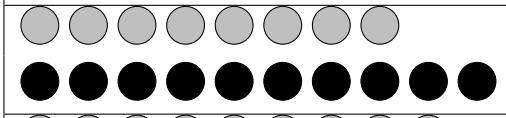
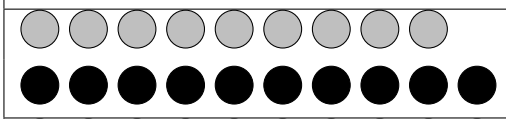
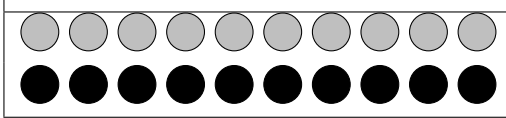
There are ... squares.

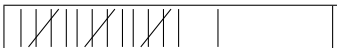
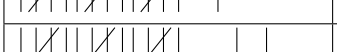
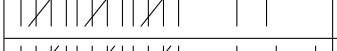
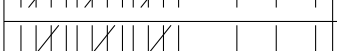
There are ... squares.



There are ... squares.

There are ... squares.

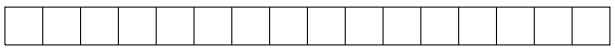
	16	sixteen
	17	seventeen
	18	eighteen
	19	eighteen
	20	twenty

	16	sixteen
	17	seventeen
	18	eighteen
	19	nineteen
	20	twenty

Exercise 159. *Trace the numbers using a pencil or pen*

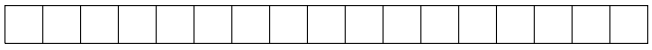
16	16	16	16	16	16
17	17	17	17	17	17
18	18	18	18	18	18
19	19	19	19	19	19
20	20	20	20	20	20

Exercise 160. *Color 10 squares red. How many squares?*

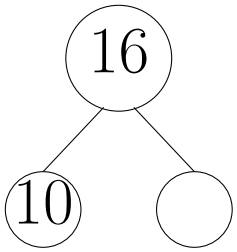
 ... squares.

 ... squares.

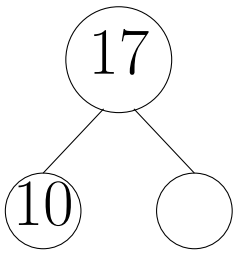
 ... squares.

 ... squares.

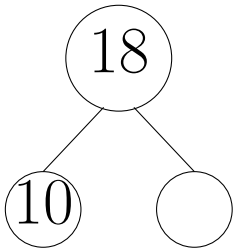
Exercise 161. *Complete and draw circles to explain.*



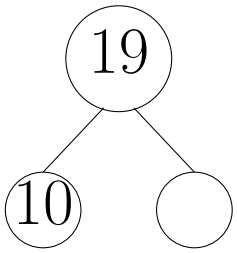
6 more than 10 is ...



7 more than 10 is ...

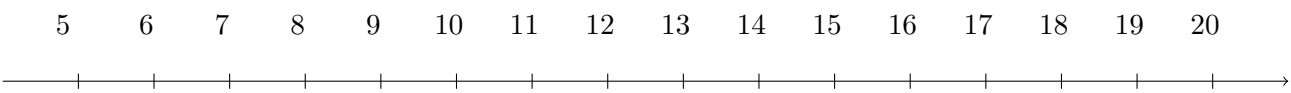


8 more than 10 is ...



9 more than 10 is ...

3.2 Number after, before and between.



The number comes between 14 and 16 is 15.
The number comes after 15 is 16.
The number comes before 15 is 14.

Exercise 162. *Complete.*

Which number comes between 17 and 19 ?	
Which number comes between 10 and 12 ?	
Which number comes after 16?	
Which number comes after 10 ?	
Which number comes before 20 ?	
Which number comes before 5 ?	

Exercise 163. *Write the number comes after.*

14	15	
10	11	
18	19	
9	10	
12	13	
16	17	

Exercise 164. *Write the number comes before.*

	11	12
	17	18
	19	20
	10	11
	14	15
	16	17

Exercise 165. *Write the number comes between.*

11		13
15		17
16		18
17		19
12		14
18		20

Exercise 166. *Write the missing number.*

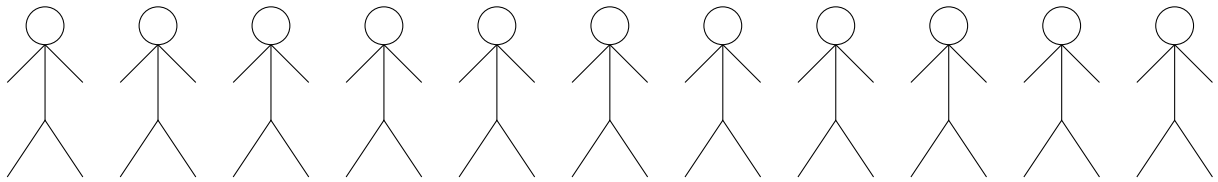
8		10		12		14		16		18	
9		11		13		15		17		19	
7				11				15			
4				8				12			
5				9							
0				4							
6				10							

3.3 Ordinal numbers

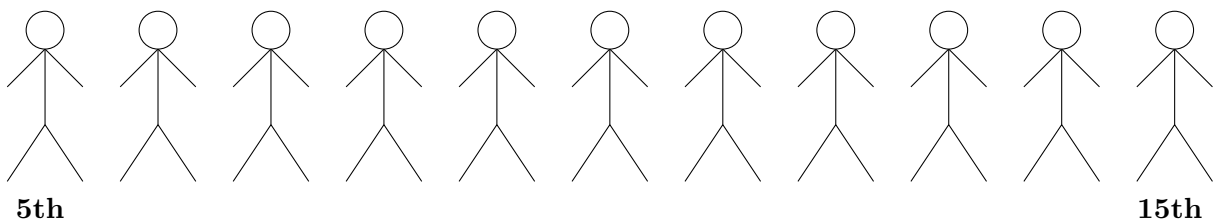
Cardinal	
11	eleven
12	twelve
13	thirteen
14	fourteen
15	fifteen
16	sixteen
17	seventeen
18	eighteen
19	nineteen
20	twenty

Ordinal	
11th	eleventh
12th	twelfth
13th	thirteenth
14th	fourteenth
15th	fifteenth
16th	sixteenth
17th	seventeenth
18th	eighteenth
19th	nineteenth
20th	twenteith

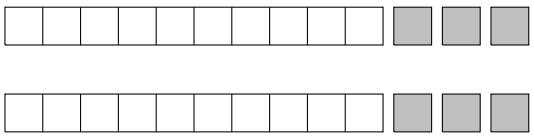
Exercise 167. *circle the 14th.*



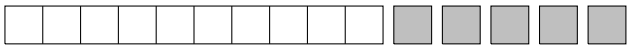
Exercise 168. *circle the 11th.*



3.4 Addition



$10 + 3 = 13.$



$10 + 5 = 15.$

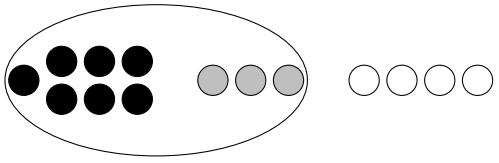
Exercise 169. *Draw circle and add. The first example is done for you.*

○○○○○○ ●●●●●●●●●●	$10 + 6 = 16$
●●●●●●●●●●	$10 + 1 =$
●●●●●●●●●●	$10 + 9 =$
●●●●●●●●●●	$10 + 10 =$
●●●●●●●●●●	$10 + 2 =$
●●●●●●●●●●	$10 + 4 =$
●●●●●●●●●●	$10 + 8 =$

Exercise 170.

Maria bought 7 apple, 3 pears, and 4 oranges.

How many pieces of fruit did she buy in all?



$$... + ... + ... = ...$$

$$10 + ... = ...$$

Exercise 171.

Jane has 5 cats, 5 dogs , and 2 birds.

How many pets does she have in all?

Make a simple math drawing. Circle 10 and solve.

$$... + ... + ... = ...$$
$$10 + ... = ...$$

Exercise 172.

Jack gets stickers at school for good work.

He got 6 puffy stickers, 4 smelly stickers, and 7 flat stickers.

How many stickers did Jack get at school altogether? Make a simple math drawing.

Circle 10 and solve.

$$... + ... + ... = ...$$
$$10 + ... = ...$$

Exercise 173.

The teacher take a photo with 8 childrens on her right and 9 childrens on her left.

How many people are at the the photo?

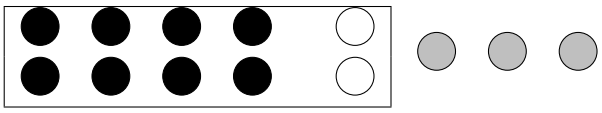
Make a simple math drawing. Circle 10 and solve.

$$\ldots + \ldots + \ldots = \ldots$$
$$10 + \ldots = \ldots$$

Exercise 174. *Circle the numbers that make ten. Draw a picture. Complete the number sentence.*

$\textcircled{8} + \textcircled{2} + 3 = \cdots$

$10 + \cdots = \cdots$



$9 + 1 + 2 = \ldots$

$10 + \ldots = \ldots$

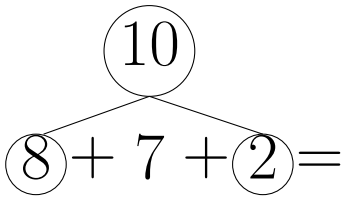
$5 + 7 + 5 = \ldots$

$10 + \ldots = \ldots$

$3 + 7 + 6 = \ldots$

$10 + \ldots = \ldots$

Exercise 175. *Circle the numbers that make ten, and put them into a number bond. Write a new number sentence.*



$8 + 7 + 2 =$ ... + ... = ...

$3 + 7 + 8 =$ ... ... + ... = ...

$9 + 4 + 1 =$ ... ... + ... = ...

$6 + 4 + 3 =$ ... ... + ... = ...

$5 + 6 + 5 =$ ... ... + ... = ...

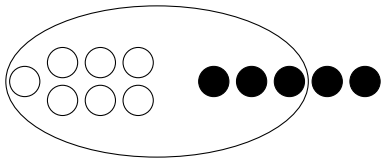
$9 + 1 + 5 =$ ... ... + ... = ...

$2 + 8 + 9 =$ ... ... + ... = ...

Exercise 176.

Bob has 7 white balls and 5 black balls.

How many balls Bob have in all?



5 is equal to 3 and ....

7 and 3 make ....

10 and 2 make ....

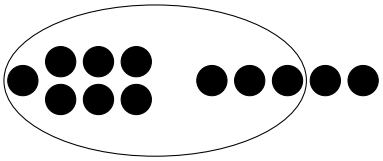
Bob have ... balls in all.

$7 + 5 =\cdots$

Exercise 177. *Complete the number sentences.*

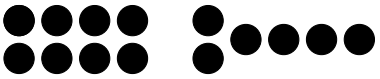
$7 + \ldots = 10$	$\ldots + 7 = 10$	$6 + \ldots = 10$
$5 + \ldots = 10$	$\ldots + 8 = 10$	$8 + \ldots = 10$
$9 + \ldots = 10$	$\ldots + 9 = 10$	$4 + \ldots = 10$
$2 + \ldots = 10$	$\ldots + 3 = 10$	$1 + \ldots = 10$

Exercise 178. *Circle ten and add. The first example is done for you.*



$7 + 5 = 12$

3 2



$8 + 6 = \cdots$

2 4

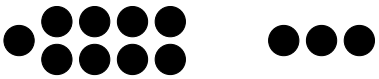
$9 + 4 = \cdots$

1

$5 + 6 = \cdots$

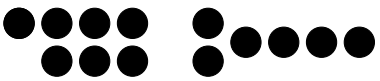
5

$8 + 4 = \cdots$



$9 + 3 = \cdots$

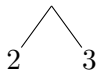
$8 + 5 =$



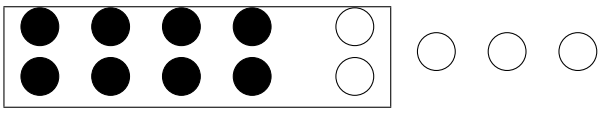
$7 + 6 = \cdots$

Exercise 179. *Make math drawings using the ten-frame to show how you made 10.*

$8 + 5 = \cdots$



$10 + \cdots = \cdots$



$9 + 3 = \ldots$

$10 + \ldots = \ldots$

$7 + 4 = \ldots$

$10 + \ldots = \ldots$

$8 + 6 = \ldots$

$10 + \ldots = \ldots$

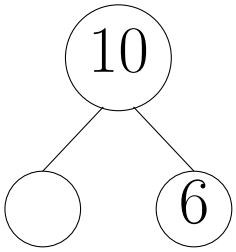
$9 + 6 = \ldots$

$10 + \ldots = \ldots$

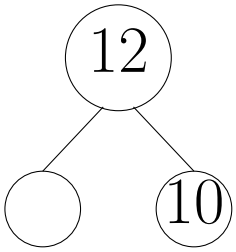
$7 + 6 = \ldots$

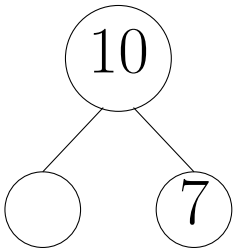
$10 + \ldots = \ldots$

Exercise 180. *Complete.*

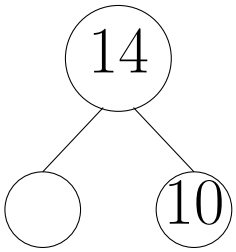


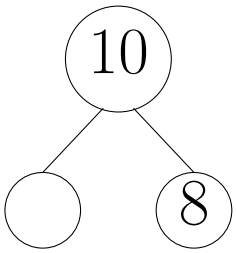
$6 + 6 = \cdots$



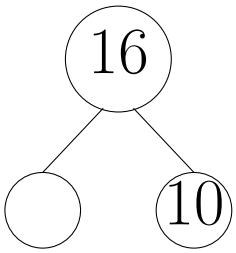


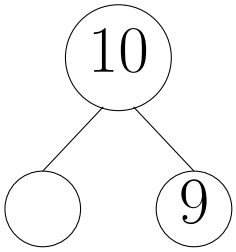
$7 + 7 = \cdots$



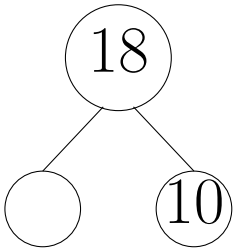


$8 + 8 = \cdots$

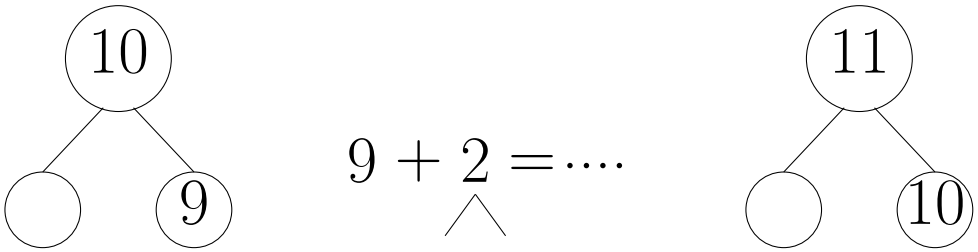


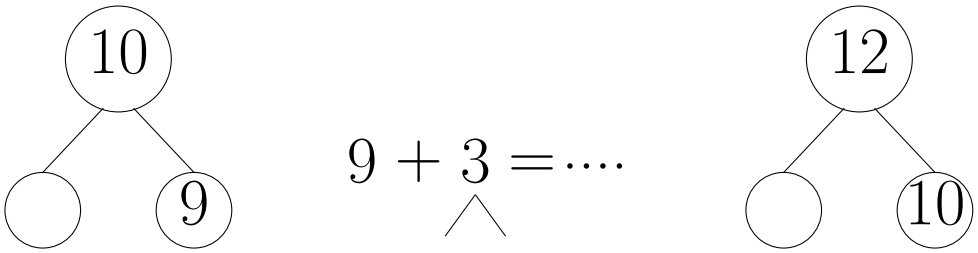


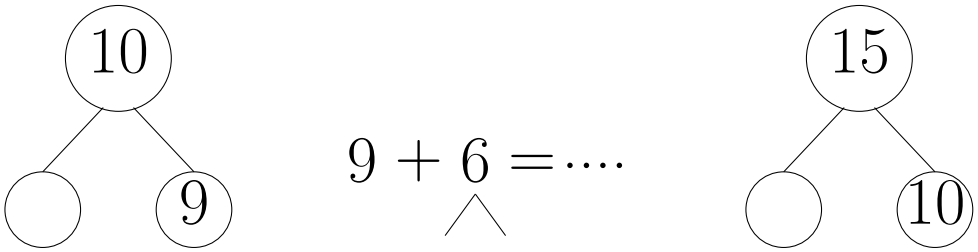
$9 + 9 = \cdots$

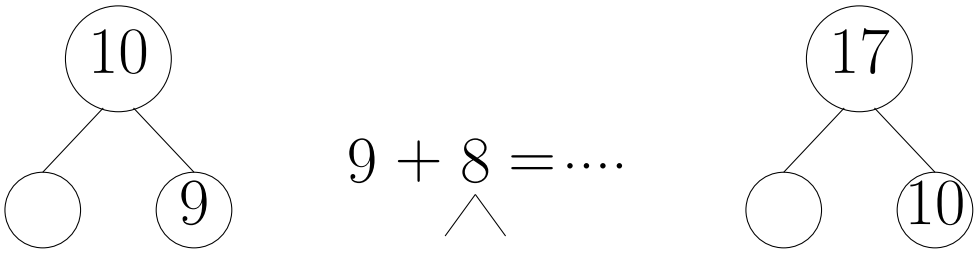


Exercise 181. *Complete.*

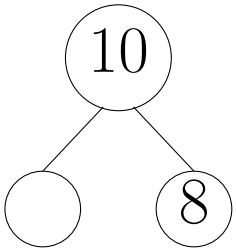




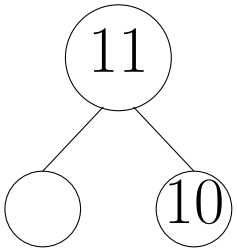


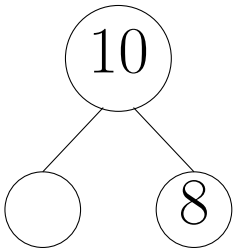


Exercise 182. *Complete.*

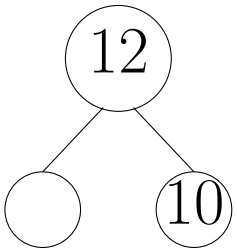


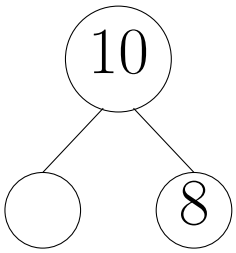
$8 + 3 = \cdots$



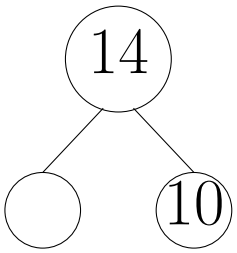


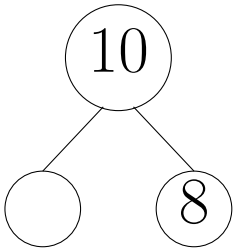
$8 + 4 = \cdots$



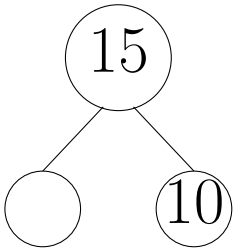


$8 + 6 = \cdots$

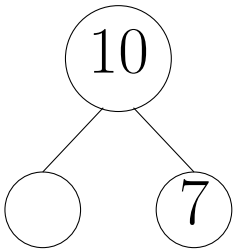




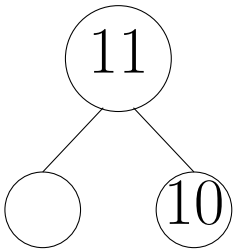
$8 + 7 = \cdots$

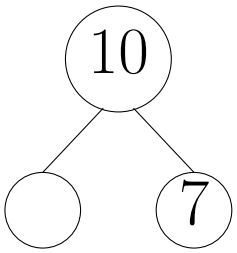


Exercise 183. *Complete.*

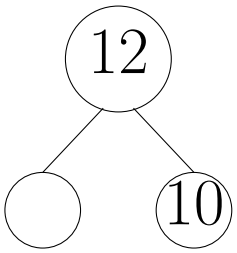


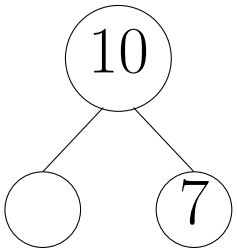
$7 + 4 = \cdots$



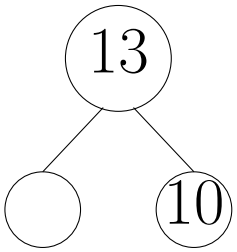


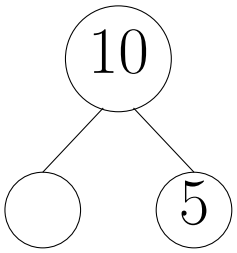
$7 + 5 = \cdots$



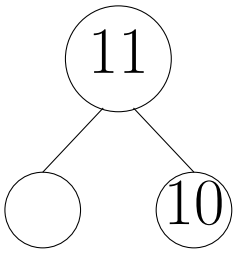


$7 + 6 = \cdots$





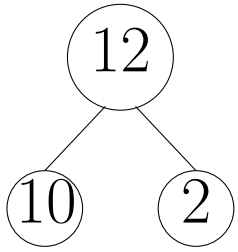
$5 + 6 = \cdots$



Exercise 184. *Add.*

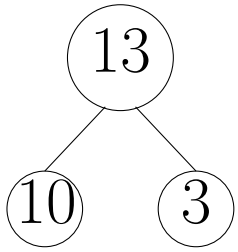
$9 + 2 =$	$8 + 3 =$	$7 + 4 =$
$6 + 5 =$	$10 + 1 =$	$2 + 9 =$
$6 + 6 =$	$9 + 3 =$	$8 + 4 =$
$7 + 5 =$	$10 + 2 =$	$4 + 8 =$
$9 + 4 =$	$8 + 5 =$	$7 + 6 =$
$5 + 8 =$	$10 + 3 =$	$4 + 9 =$
$8 + 6 =$	$13 + 1 =$	$7 + 7 =$
$5 + 9 =$	$11 + 3 =$	$9 + 5 =$
$8 + 7 =$	$9 + 6 =$	$9 + 8 =$
$8 + 8 =$	$9 + 9 =$	$7 + 9 =$
$8 + 10 =$	$18 + 1 =$	$17 + 2 =$

Exercise 185. *Complete.*



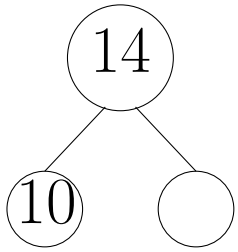
$9 + \quad = 12$	$8 + \quad = 12$	$7 + \quad = 12$
$6 + \quad = 12$	$2 + \quad = 12$	$3 + \quad = 12$

Exercise 186. *Complete.*



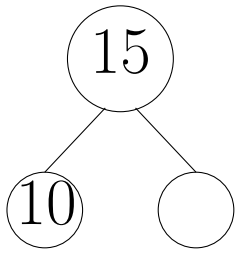
$9 + \quad = 13$	$8 + \quad = 13$	$7 + \quad = 13$
$6 + \quad = 13$	$3 + \quad = 13$	$4 + \quad = 13$

Exercise 187. *Complete.*



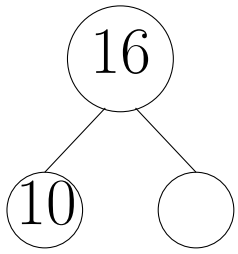
$9 + \quad = 14$	$8 + \quad = 14$	$7 + \quad = 14$
$6 + \quad = 14$	$4 + \quad = 14$	$5 + \quad = 14$

Exercise 188. *Complete.*



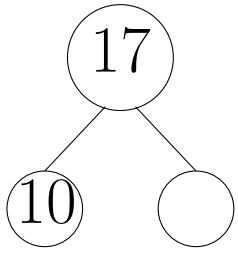
$9 + \quad = 15$	$8 + \quad = 15$	$7 + \quad = 15$
$6 + \quad = 15$	$5 + \quad = 15$	$4 + \quad = 15$

Exercise 189. *Complete.*



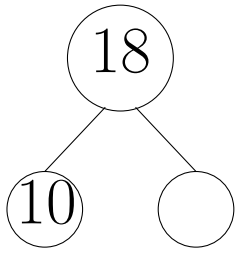
$9 + \quad = 16$	$8 + \quad = 16$	$7 + \quad = 16$
$6 + \quad = 16$	$1 + \quad = 16$	$3 + \quad = 16$

Exercise 190. *Complete.*



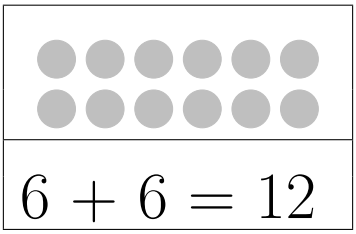
$9 + \quad = 17$	$8 + \quad = 17$	$7 + \quad = 17$

Exercise 191. *Complete.*



$9 + \quad = 18$	$8 + \quad = 18$	$7 + \quad = 18$

3.5 Doubles and doubles plus 1

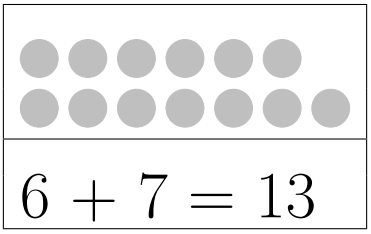


We add the same number two times

a doubles

$6 + 6 = 12$

12 is even number



We add a number and the next

$6 + 7 = 13$

a doubles plus 1

13 is odd number

Exercise 192. *Add. Color doubles red. Color doubles plus 1 green.*

$6 + 6 =$	$5 + 6 =$	$7 + 7 =$
$8 + 8 =$	$9 + 9 =$	$7 + 8 =$
$3 + 3 =$	$8 + 9 =$	$4 + 4 =$
$4 + 5 =$	$5 + 5 =$	$9 + 10 =$

Exercise 193. *Complete.*

$6 + 6 =$ .. so 12 is an **even** number.

$5 + 6 =$ .. so 11 is an **odd** number.

$5 + 5 =$ .. so 14 is an ..... number.

$7 + 7 =$ .. so 14 is an ..... number.

$. + . = 16$ so 16 is an ..... number.

$7 + 8 =$ .. so 15 is an ..... number.

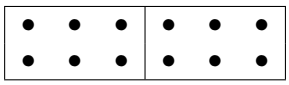
$9 + 9 =$ .. so 18 is an ..... number.

$9 + .. = 19$ so 19 is an ..... number.

$.. + .. = 20$ so 20 is an ..... number.

$4 + .. = 8$ so 8 is an ..... number.

Exercise 194. *Complete the number sentences. Draw circles or dots to chow doubles.*

$6 + 6 = ..$ 

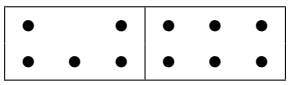
$7 + 7 = ..$

$8 + 8 = ..$

$9 + 9 = ..$

$10 + 10 = ..$

Exercise 195. *Complete the number sentences. Draw circles or dots to chow doubles plus 1*

$5 + 6 = ..$ 

$6 + 7 =$

$7 + 8 =$

$8 + 9 =$

$10 + 9 = ..$

3.6 Pattern

Exercise 196. *Complete the pattern.*

5	5	10									

6	6	12	6	6	12						

7	7	14									

8	8	16									

9	9	18									

10	10	20										

Exercise 197. *Complete the pattern.*

4	5	9									

5	6	11	5	6	11						

6	7	13									

7	8	15									

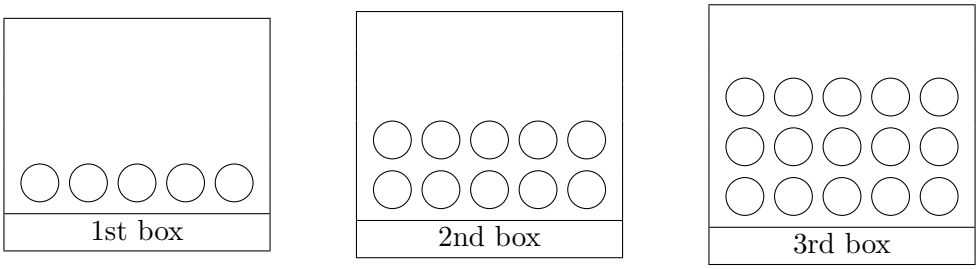
8	9	17									

9	10	19									

Exercise 198. *Complete the pattern.*

10	5	15									
15	5	20									
10	10	20									
11	9	20									
12	8	20									
12	8	20									
13	7	20									
14	6	20									
16	4	20									
17	3	20									
18	2	20									
19	1	20									

Exercise 199.



How many balls in the first box?

.....

How many balls in the second box?

.....

How many balls in the third box?

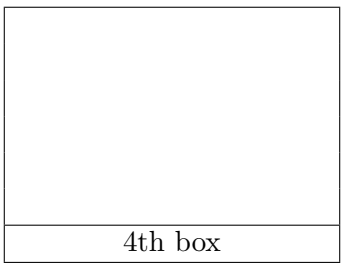
.....

If the pattern continues,

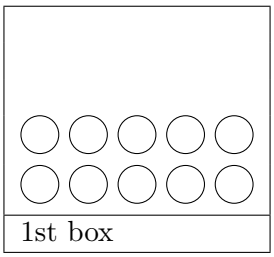
how many balls will there be in the fourth box?

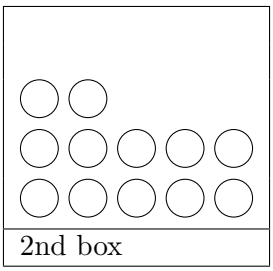
.....

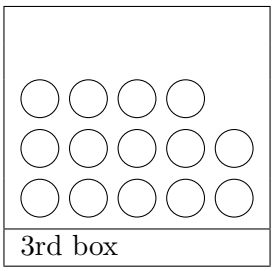
Draw balls in the fourth box



Exercise 200.







How many balls in the first box?

.....

How many balls in the second box?

.....

How many balls in the third box?

.....

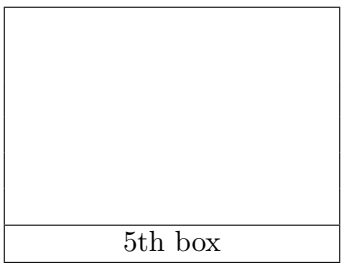
If the pattern continues,
how many balls will there be in the fourth box?

.....

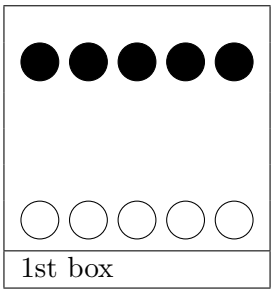
How many balls will there be in the fifth box?

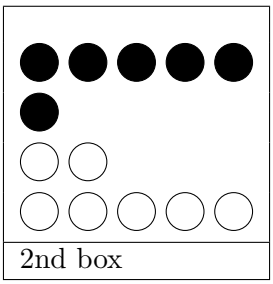
.....

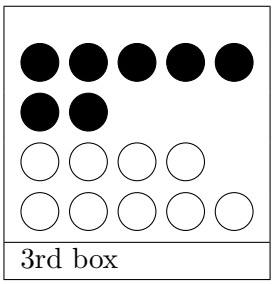
Draw balls in the fifth box



Exercise 201.







How many balls in the first box?

.....

How many balls in the second box?

.....

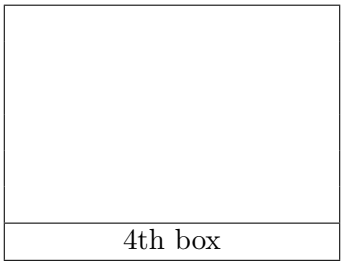
How many balls in the third box?

.....

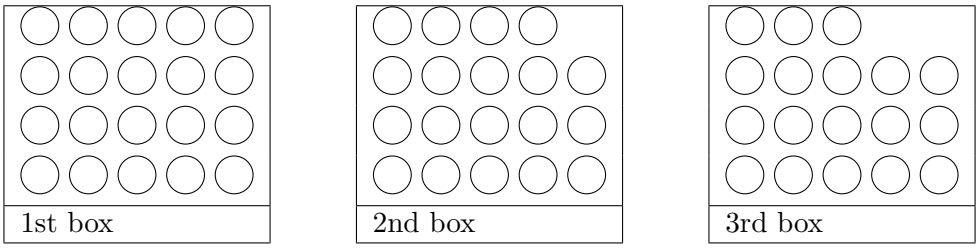
If the pattern continues,
how many balls will there be in the fourth box?

.....

Draw balls in the fourth box



Exercise 202.



How many balls in the first box?

.....

How many balls in the second box?

.....

How many balls in the third box?

.....

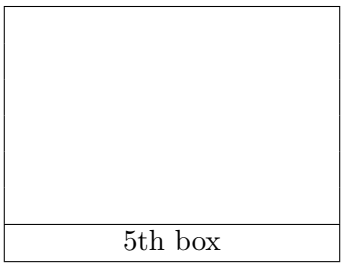
If the pattern continues,
how many balls will there be in the fourth box?

.....

How many balls will there be in the fifth box?

.....

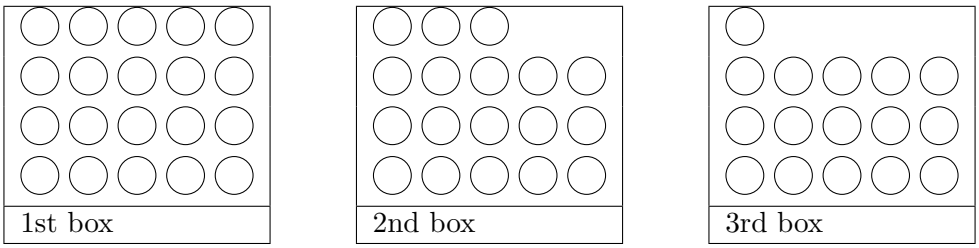
Draw balls in the fifth box



How many balls will there be in the sixth box?

.....

Exercise 203.



How many balls in the first box?

.....

How many balls in the second box?

.....

How many balls in the third box?

.....

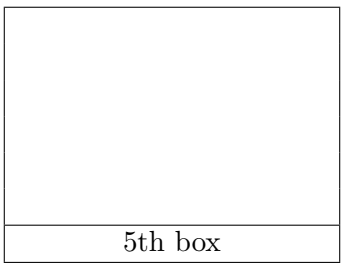
If the pattern continues,
how many balls will there be in the fourth box?

.....

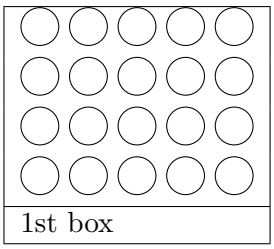
How many balls will there be in the fifth box?

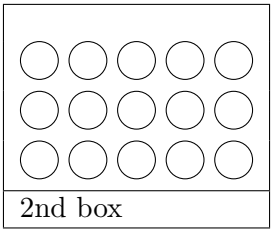
.....

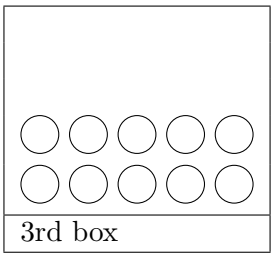
Draw balls in the fifth box



Exercise 204.







How many balls in the first box?

.....

How many balls in the second box?

.....

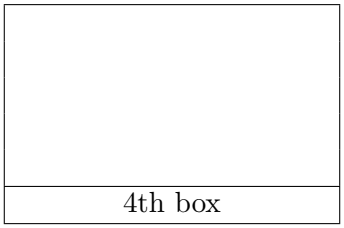
How many balls in the third box?

.....

If the pattern continues,
how many balls will there be in the fourth box?

.....

Draw balls in the fourth box

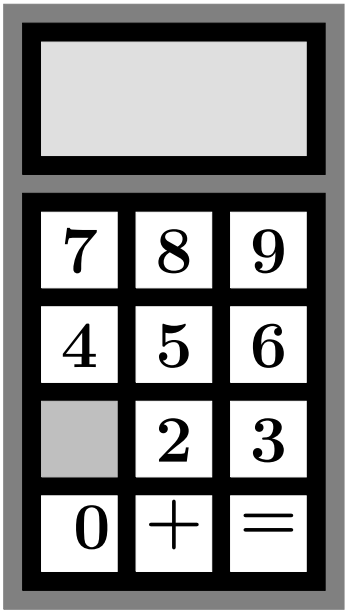


How many balls will there be in the fifth box?

.....

3.7 Words problems

Exercise 205.



Which key number is broken on the calculator?

.....

How we can make the number 11 appear on the screen without the 1 key? (Give six possibilities)

.....

.....

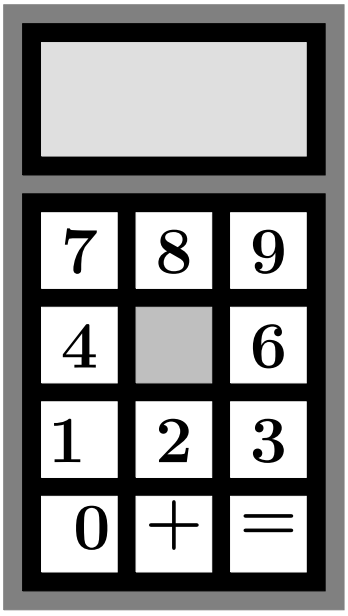
.....

.....

.....

.....

Exercise 206.



Which key number is broken on the calculator?

.....

How we can make the number 15 appear on the screen without the 5 key ? (Give six possibilities)

.....

.....

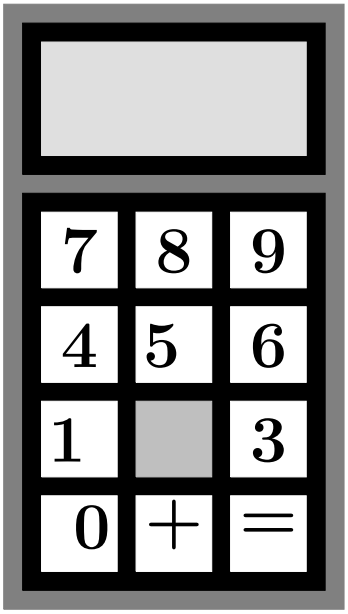
.....

.....

.....

.....

Exercise 207.



Which key number is broken on the calculator?

.....

How we can make the number 20 appear on the screen without the 2 key ? (Give six possibilities)

.....

.....

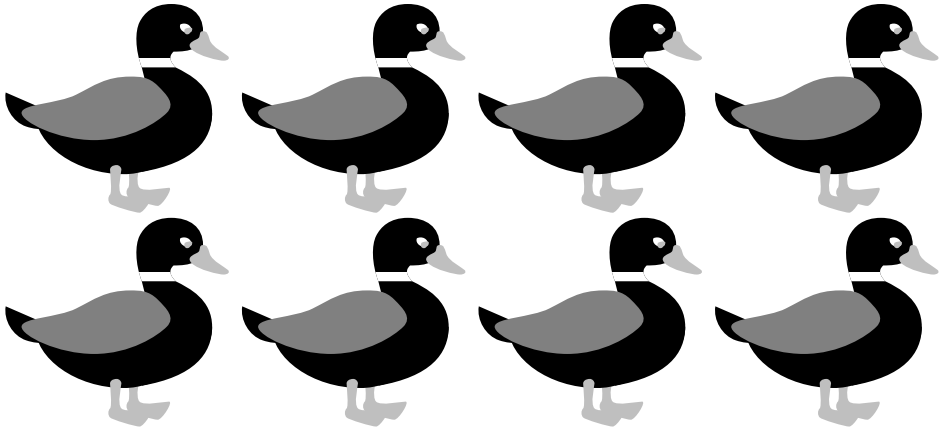
.....

.....

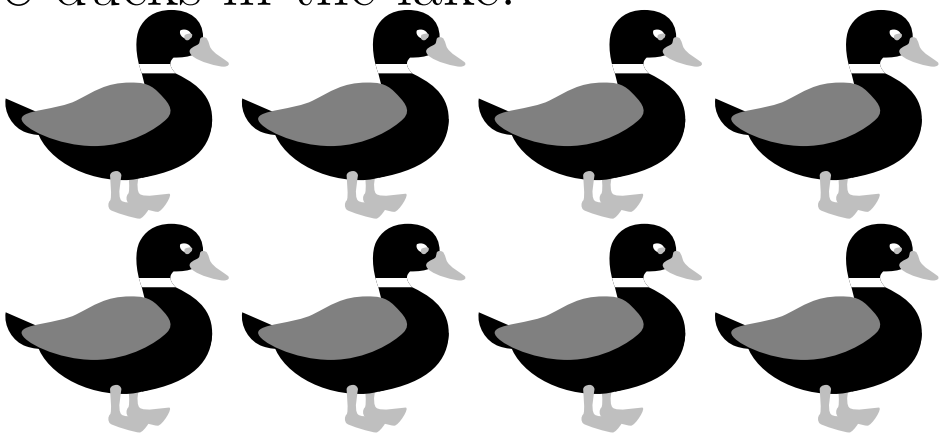
.....

.....

Exercise 208.



8 ducks in the lake.



8 ducks arrive at the lake.

How many ducks are there?

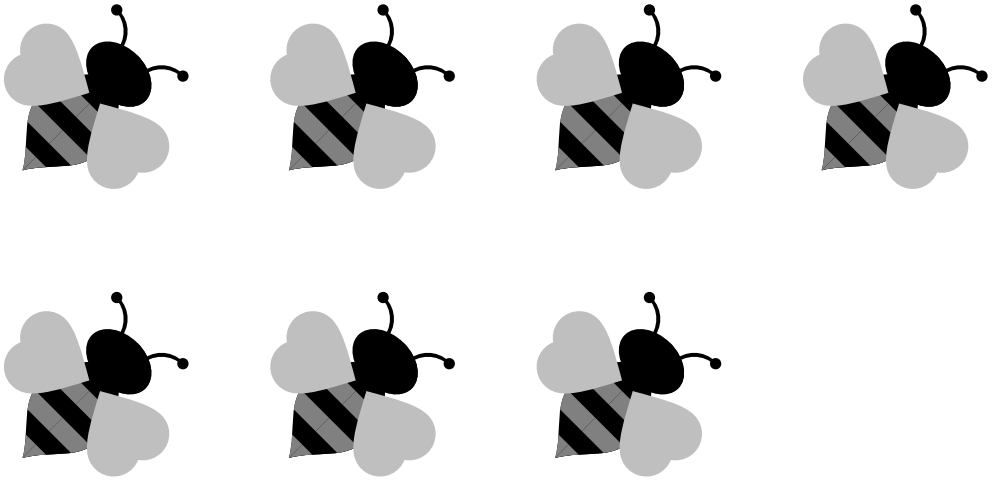
.....

Make the number bond and draw circles or dots to much the story.

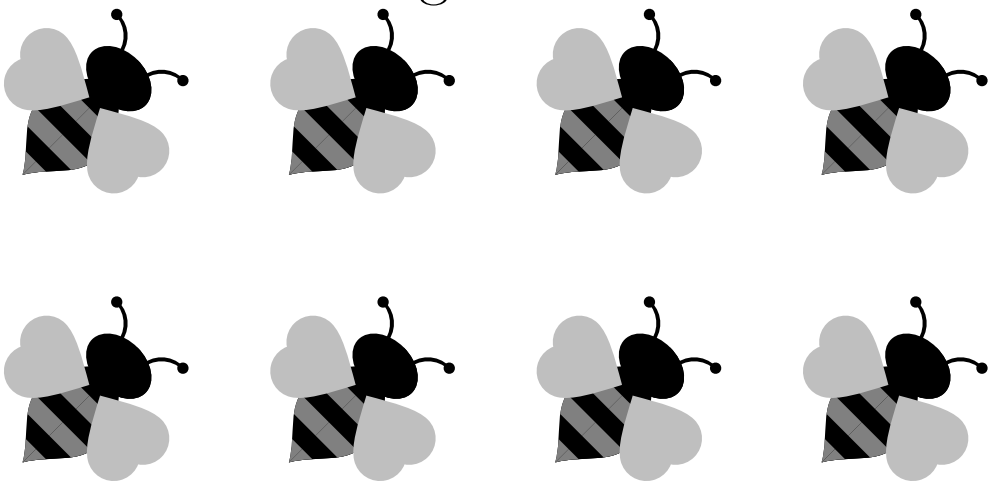
Is 16 even or odd? (justify)

.....

Exercise 209.



There 7 bees in garden.



8 bees arrive at garden.

How many bees are there?

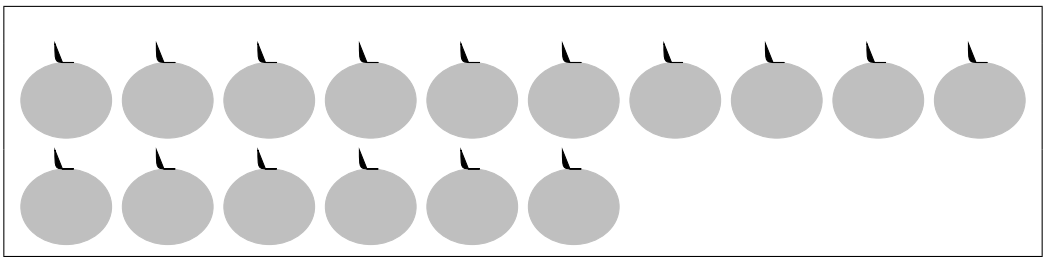
.....

Make the number bond and draw circles or dots to much the story.

Is 15 even or odd? (justify)

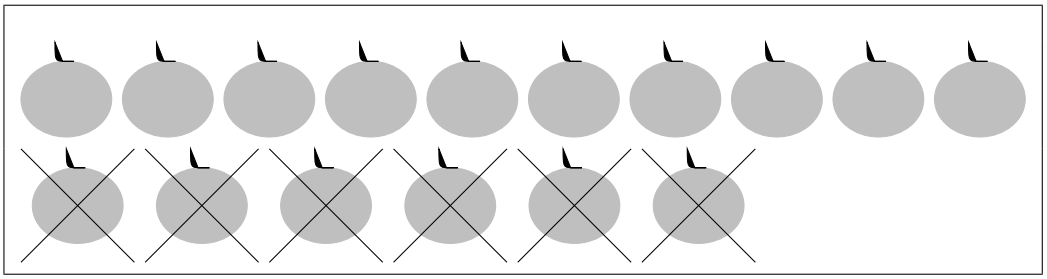
.....

3.8 Subtraction



I have 16 apples. We eat 6 apples.

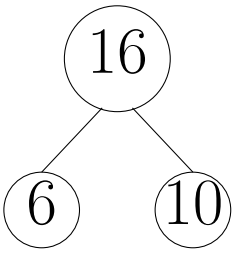
How many apples left?

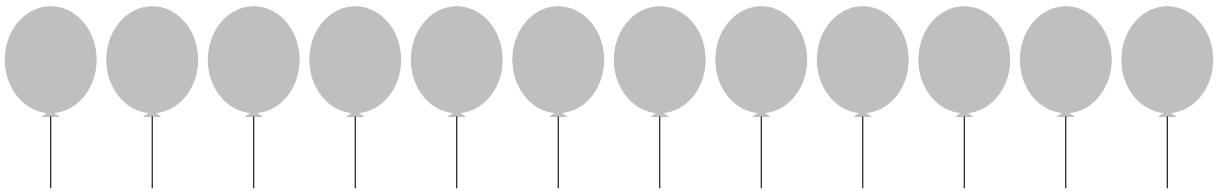


10 apples left.

We have $16 = 10 + 6$, so 16 - 6 = 10

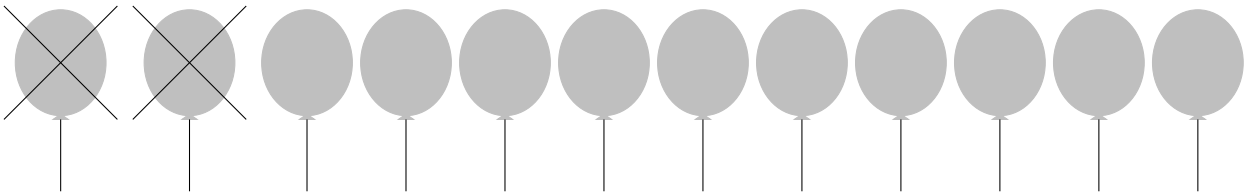
The number bond:





I have 12 balloons. 2 balloon brust.

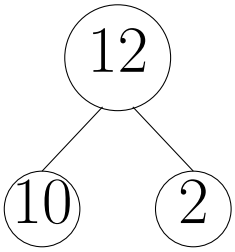
How many balloons left?



10 balloon left.

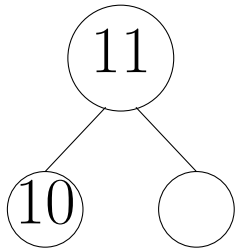
We have $10 + 2 = 12$ so $12 - 2 = 10$

The number bond:

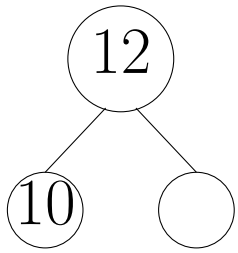


Exercise 210.

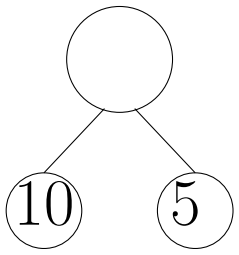
$10 + . = 11$ so $11 - . = 10$ and



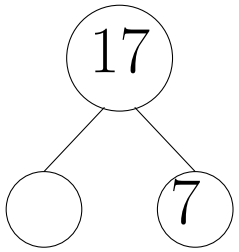
$10 + . = 12$ so $12 - . = 10$ and



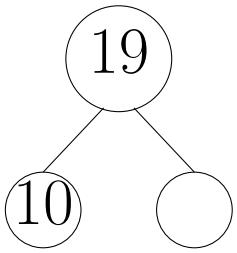
$10 + . = 15$ so $15 - . = 10$ and



$10 + . = 17$ so $17 - 7 = ..$ and

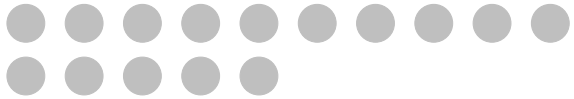


$10 + 9 =$ so $19 - 9 = ..$ and

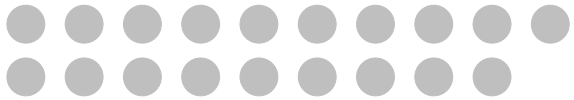


Exercise 211. *Complete.*

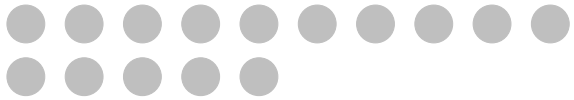
4 - 2 = .
14 - 2 = ..



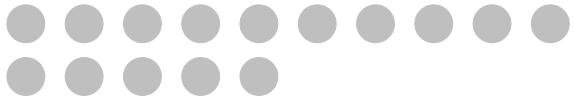
5 - 3 = .
15 - 3 = ..



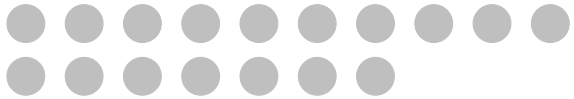
9 - 6 = .
19 - 6 = .



5 - 4 = .
15 - 4 = ..



5 - 1 = .
15 - 1 = ..



7 - 2 = .
17 - 2 = ..

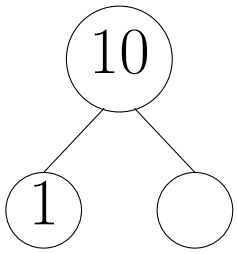
7 - 4 = .
17 - 4 = ..

9 - 7 = .
19 - 7 = .

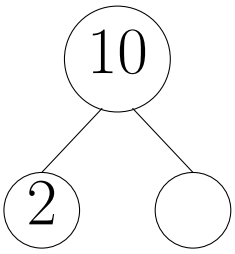
Exercise 212. *Complete*

15 - 2 = ..	13 - 3 = ..	17 - 1 = ..
15 - 1 = ..	13 - 2 = ..	17 - 6 = ..
18 - 3 = ..	16 - 4 = ..	17 - 3 = ..
17- 5 = ..	19 - 2 = ..	13 - 2 = ..
18 - 4 = ..	16 - 3 = ..	17 - 1 = ..
19 - 7 = ..	14 - 3 = ..	15 - 5 = ..
18 - 6 = ..	19 - 9 = ..	16 - 5 = ..
19 - 3 = ..	18 - 8 = ..	18 - 2 = ..
10 - 5 = ..	19 - 10 = .	17 - 10 = .
19 - 5 = ..	18 - 1 = ..	15 - 8 = .

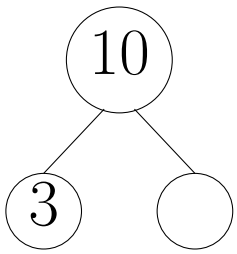
Exercise 213. *Complete.*



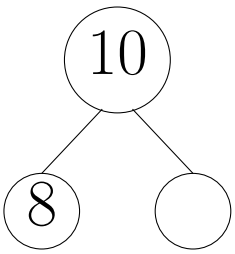
10 - 1 = .



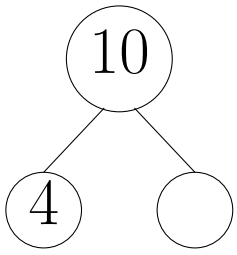
10 - 2 = .



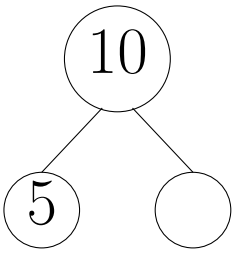
10 - 3 = .



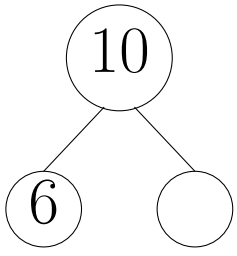
10 - 8 = .



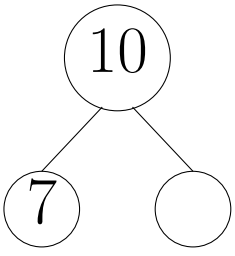
10 - 4 = .



10 - 5 = .



10 - 6 = .

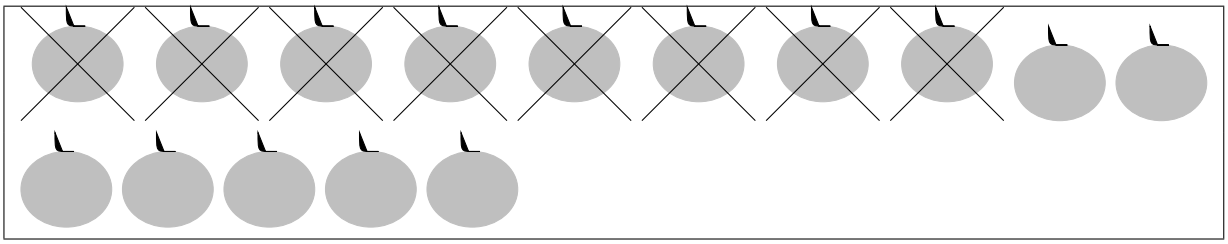


10 - 7 = .

Exercise 214. *Complete.*

We have 15 apples. We eat 8 apples.

How many apples left?



... apples left.

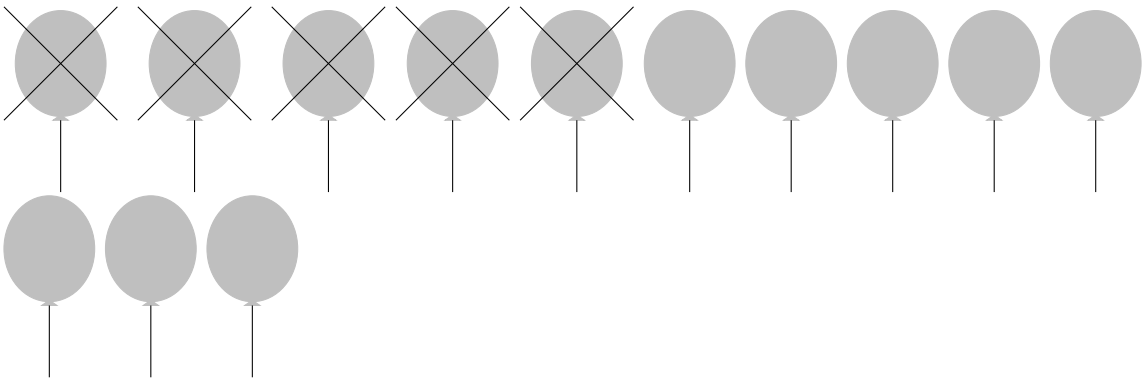
$15 = 10 + \ldots$, $10 - 8 = \ldots$ and $\ldots + 5 = 7$

so $15 - 8 = \ldots$

$15 - 8 = 2 + 5$

Exercise 215. *Complete.*

I have 13 balloons. 5 balloons brust.
How many balloons left?

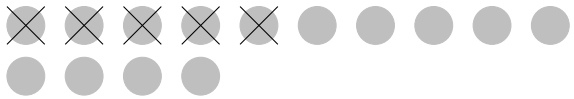


... balloon left.

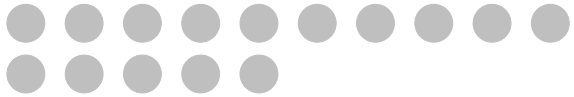
$13 = 10 + \ldots$, $10 - 5 = \ldots$ and $\ldots + 3 = 8$

so $13 - 5 = \ldots$

Exercise 216. *Complete.*

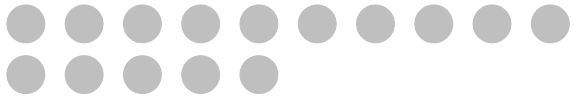


10 - 5 = .
14 - 5 = ..



10 - 9 = .
15 - 9 = ..

10 - 6 = .
13 - 6 = ..



10 - 7 = .
15 - 7 = ..

10 - 7 = .
14 - 7 = ..

10 - 9 = .
17 - 9 = ..

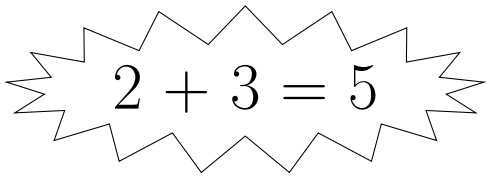
10 - 8 = .
16 - 8 = ..

10 - 8 = .
13 - 8 = ..

Exercise 217. *Complete*

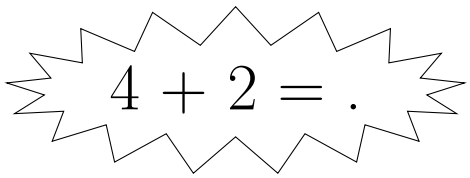
$12 - 7 = \cdot$

2 10



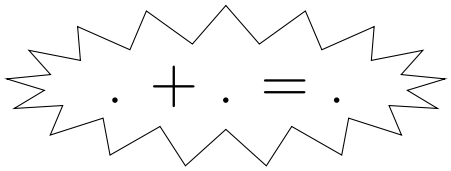
$14 - 8 = \cdot$

4 10



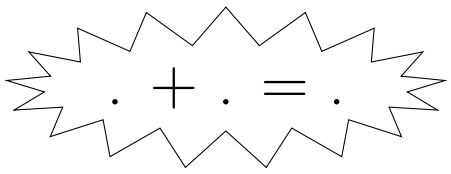
$13 - 5 = \cdot$

3 10



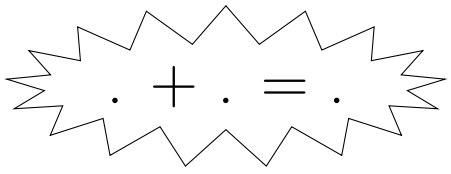
$16 - 7 = \cdot$

. .



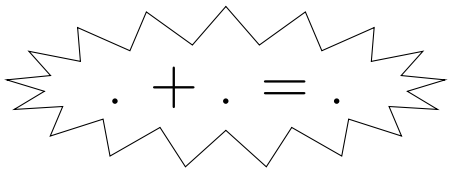
$15 - 8 = \cdot$

. .



$15 - 6 = \cdot$

. .



Exercise 218. *Match*

12 - 9 •	• 4 + 2
14 - 8 •	• 5 + 2
13 - 5 •	• 4 + 3
12 - 6 •	• 2 + 1
14 - 7 •	• 3 + 5
15 - 8 •	• 2 + 4
11 - 6 •	• 3 + 3
13 - 7 •	• 1 + 4

Exercise 219. *Complete*

$12 - 3 = \cdot$

2 10

$15 - 8 = \cdot$

5 10

$13 - 5 = \cdot$

3 10

$16 - 8 = \cdot$

6 10

$14 - 8 = \cdot$

$15 - 6 = \cdot$

$12 - 8 = \cdot$

$13 - 7 = \cdot$

$17 - 8 = \cdot$

$16 - 9 = \cdot$

$12 - 5 = \cdot$

$13 - 9 = \cdot$

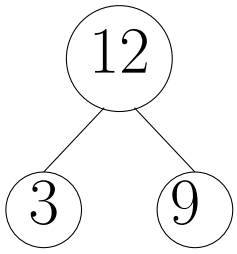
$14 - 7 = \cdot$

$18 - 9 = \cdot$

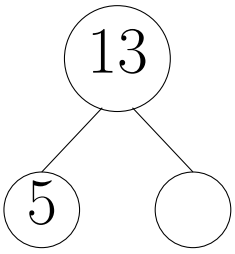
Exercise 220. *Calculate.*

15 - 6 = .	13 - 5 = .	17 - 8 = .
15 - 5 = ..	13 - 6 = .	17 - 2 = ..
18 - 8 = ..	16 - 7 = .	17 - 9 = .
12- 5 = .	14 - 7 = .	13 - 8 = .
14 - 5 = .	16 - 5 = ..	12 - 4 = .
19 - 8 = ..	14 - 9 = .	15 - 7 = .
12 - 6 = .	18 - 9 = .	16 - 7 = .
19 - 0 = ..	14 - 8 = .	18 - 1 = ..
11 - 5 = .	11 - 3 = .	19 - 10 = .
17 - 8 = .	18 - 8 = ..	12 - 8 = .
18 - 4 = .	16 - 3 = ..	10 - 7 = .

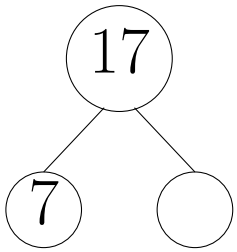
Exercise 221. *Complete.*



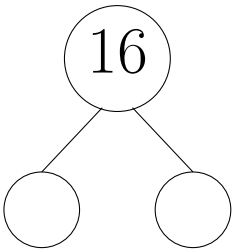
12 - 3 = .



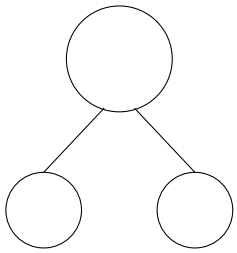
13 - 5 = .



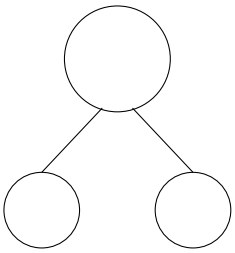
17 - 7 = .



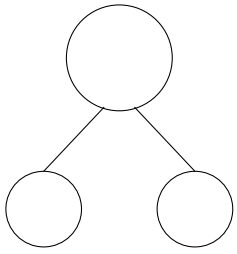
16 - 7 = .



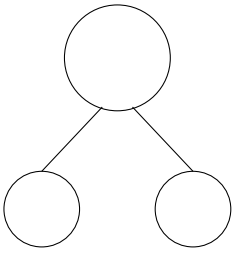
15 - 8 = .



14 - 8 = .

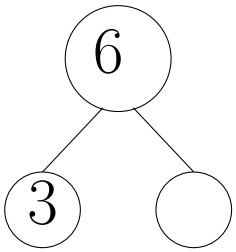


15 - 6 = .

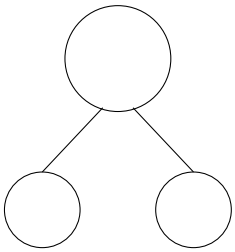


11 - 7 = .

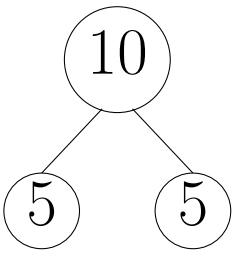
Exercise 222. *Complete.*



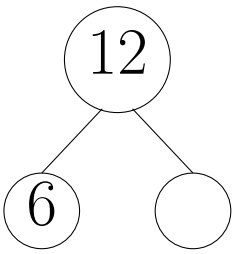
6 - 3 = .



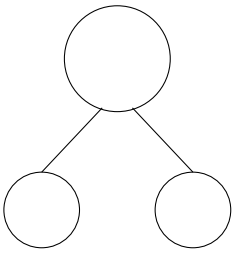
8 - 4 = .



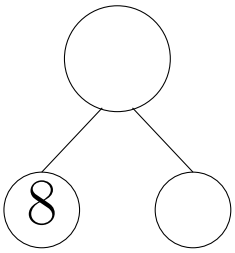
10 - 5 = .



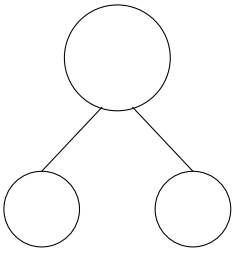
12 - 6 = .



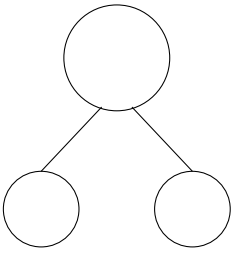
14 - 7 = .



16 - 8 = .

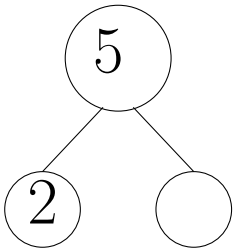


18 - 9 = .

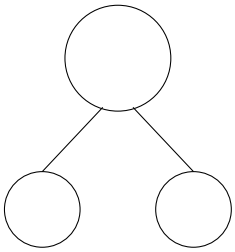


20 - 10 = ..

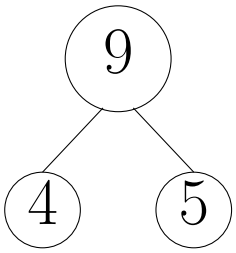
Exercise 223. *Complete.*



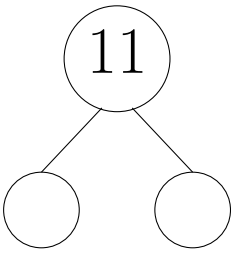
5 - 2 = .



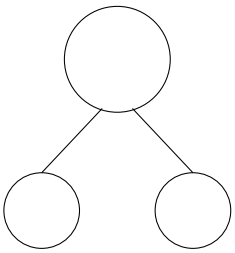
7 - 3 = .



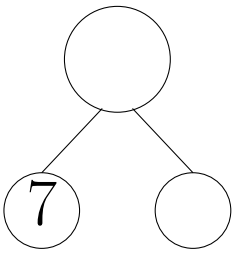
9 - 4 = .



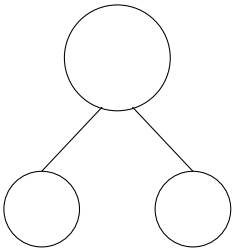
11 - 5 = .



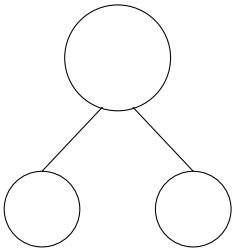
13 - 6 = .



15 - 7 = .



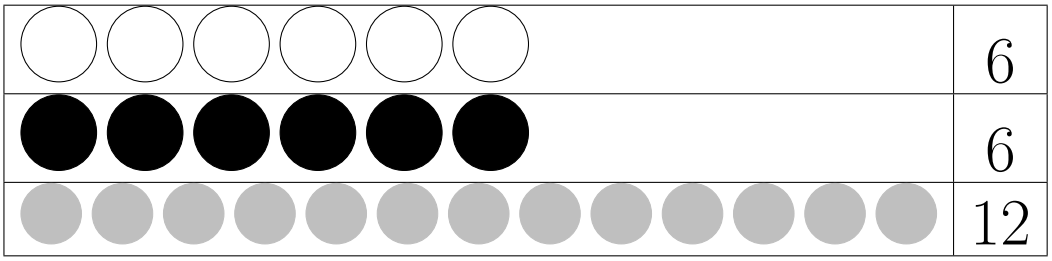
17 - 8 = .



19 - 9 = ..

3.9 Comparison of numbers

Exercise 224. *Fill in the blanks with more, less, >, < or =*



- There are ..... white circles than gray circles

6 ... 12

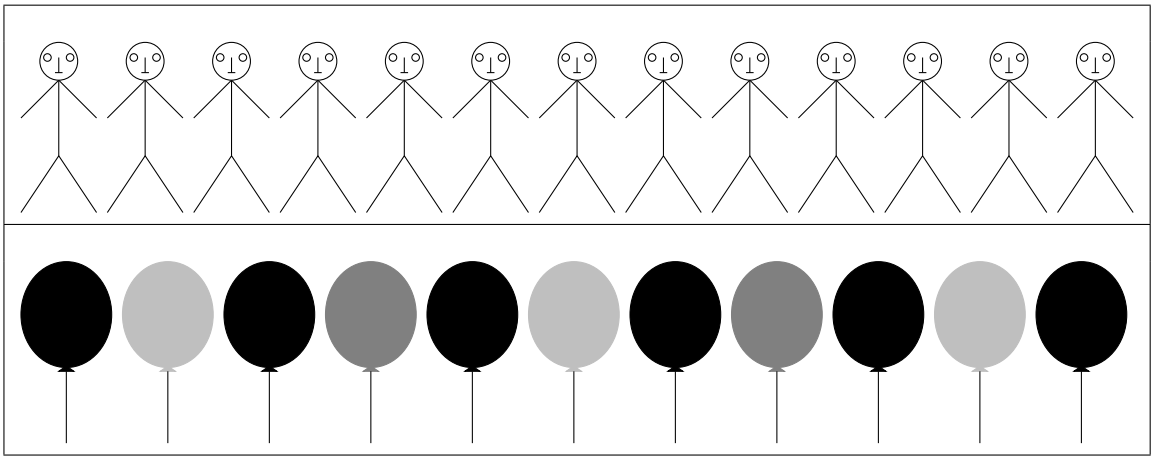
- There are ..... gray circles than black circles.

12 ... 6

- There are as many white circles as there are black circles.

6 ... 6

Exercise 225. *Fill in the blanks with more, less, > or <*



- There are ..... childrens than balloons

13 ... 11

- There are ..... balloons than childrens

11 ... 13

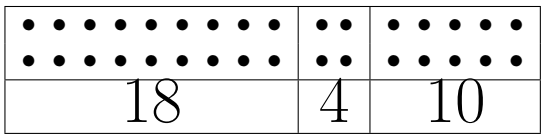
Exercise 226. *Fill in the blanks with greater, less, > or <*

- seventeen is ..... than fourtenn, so 17 ... 14.
- fourteen is ..... than seventeen , so 14 ... 17.
- nineteen is ..... than twenty, so 19 ... 20.
- twenty is ..... than nineteen , so 20 ... 19.
- eleven is ..... than five , so 11 ... 5.
- sixteen is ..... than eight , so 16 ... 8.
- nine is ..... than twelve , so 9 ... 12.

Exercise 227. *Fill in the blanks with > , < or =*

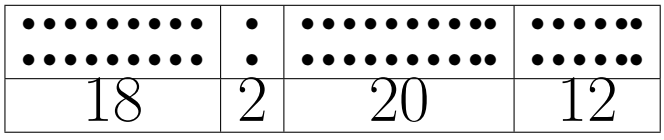
$1 + 9 + 2 \ldots 10 + 2$	$17 - 7 \ldots 19 - 9$
$8 + 2 + 5 \ldots 7 + 7$	$14 - 7 \ldots 15 - 9$
$5 + 5 + 5 \ldots 8 + 8$	$16 - 8 \ldots 15 - 7$
$7 + 3 + 8 \ldots 9 + 9$	$12 - 6 \ldots 10 - 4$
$9 + 1 + 8 \ldots 10 + 7$	$18 - 9 \ldots 15 - 5$

Ascending order and descending order

		
18	4	10

- The least number is 4.
- The greatest number is 18.
- $4 < 10 < 18$. The ascending order is 4, 10, 18.
- $18 > 10 > 4$. The descending order is 18, 10, 4

Exercise 228.

			
18	2	20	12

- The least number is ...
- The greatest number is ...
- ... < ... < ... < ....

The ascending order is ..., ..., ..., ...

- ... > ... > ... > ... .

The descending order is ..., ..., ..., ...

Exercise 229. *Arrange the number in ascending order.*

17	11	13	10	15					

12	8	14	10	16					

19	1	13	7	15					

5	13	15	19	20					

Exercise 230. *Arrange the number in descending order.*

17	1	13	10	15						
20	8	14	10	16						
19	1	13	17	15						
5	13	15	19	20						

Exercise 231. *Circle the least (smallest) number.*

17	11	9	10	15		18	16	19	10	15
19	3	9	10	16		11	16	19	10	7

Exercise 232. *Circle the greatest (biggest) number.*

6	19	17	20	15		8	16	9	13	15
19	3	9	10	16		11	16	19	10	7

Exercise 233. *Fill in the blanks with smallest, biggest, bigger or smaller, then give the orders.*

16	19	17	12	15

- 12 is the ..... number of the list.
- 19 is the ..... number of the list.
- 12 is ..... than 17.
- 15 is ..... than 12.
- The ascending order is ..., ..., ..., ..., ...
- The descending order is ..., ..., ..., ..., ...

Exercise 234. *Arrange the odd numbers up to twenty in ascending order.*

Exercise 235. *Arrange the odd numbers up to twenty in descending order.*

19									

Exercise 236. *Arrange the even numbers up to twenty in ascending order.*

0										20

Exercise 237. *Arrange the even numbers up to twenty in descending order.*

3.10 Word problems

Exercise 238.

There are 15 childrens in a dance group, only 7 of them are boys.

(a) Complete 10 - 7 = . and 5 + 3 = .

(b) How many girls are there?

Explain your thinking using a math drawing, numbers and words.

(c) Make the number bond to match the story.

(d) Write two substruction sentence to match the story.

(e) Write four addition sentence to match the story.

Exercise 239.

There are 12 birds on the tree, 6 of them fly away.

(a) How many birds stay on the tree?

Explain your thinking using a math drawing, numbers and words.

(b) Make the number bond to match the story.

(c) Write two substruction sentence to match the story.

(d) Write four addition sentence to match the story.

(e) Is 12 even or odd? Justify.

Exercise 240.

Raul have 17 pens, 8 of them are browken, the others are good.

(a) How many good pens are there ?

Explain your thinking using a math drawing numbers and words.

(b) Make the number bond to match the story.

(c) Write two substruction sentence to match the story.

(d) Write addition sentence to match the story.

Are there doubles or doubles plus 1 ? Is 17 even or odd?

Exercise 241.

We need 14 tomatoes to make our sauce for dinner. We have only 7 tomatoes.

(a) How many more tomatoes do we need ? Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond that shows the story.

(c) Write the addition sentence to match the story.

Is 14 even or odd?

(d) Write the substruction sentence to match the story.

(e) Is 7 even or odd? Justify.

Exercise 242.

There are 6 birds on the tree.

Some more birds join them.
Now there are 14 birds on the tree.

(a) How many birds join them?

Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond to shows the story.

(c) Write the addition sentence and a substruction sentence to match the story.

....

Exercise 243.

There are 9 students in the classroom.

Some more students join them.
Now there are 15 students in the classroom.

(a) How many students join them?

Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond to shows the story.

(c) Write the addition sentence and a substruction sentence to match the story.

....

Exercise 244.

Jane confused about this problem :

$$\ldots = 12 - 3$$

Write two addition number sentences that might help her understand and solve it.

Explain to Jane using words, pictures, or numbers, too.

Exercise 245.

Sam confused about this problem :

$$\ldots = 12 - 6$$

Write two addition number sentences that might help him understand and solve it.

Explain to Sam using words, pictures, or numbers, too.

Exercise 246.

Kate confused about this problem :

$$\ldots = 12 - 5$$

Write two addition number sentences that might help her understand and solve it.

Explain to Kate using words, pictures, or numbers, too.

Exercise 247.

Jhon confused about this problem :

$$\ldots = 16 - 8$$

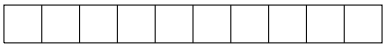
Write two addition number sentences that might help him understand and solve it.

Explain to Jhon using words, pictures, or numbers, too.

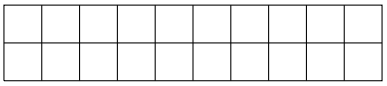
Chapter 4

Up to 100

4.1 Numbers counted up to 100



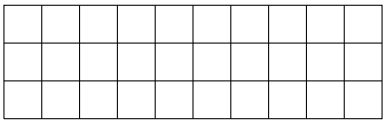
10 **ten** squares



$$10 \overset{+10}{\rightarrow} 20$$

$$10 + 10 = 20$$

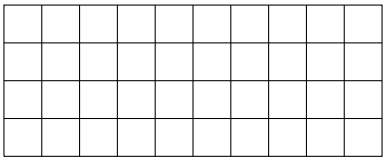
ten more than ten is **twenty**



$$20 \overset{+10}{\rightarrow} 30$$

$$20 + 10 = 30$$

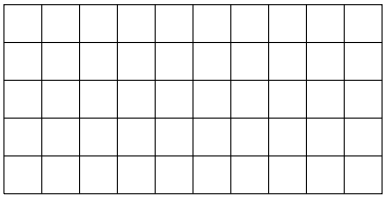
ten more than twenty is **thirty**



$$30 \overset{+10}{\rightarrow} 40$$

$$30 + 10 = 40$$

ten more than thirty is **fourty**



$$40 \overset{+10}{\rightarrow} 50$$

$$40 + 10 = 50$$

ten more than fourty is **fifty**

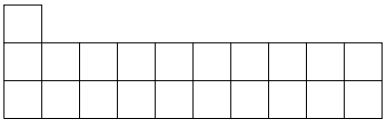
$50 \overset{+10}{\rightarrow} 60$ so $50 + 10 = 60$
ten more than fifty is **sixty**

$60 \overset{+10}{\rightarrow} 60$ so $60 + 10 = 70$
ten more than sixty is **seventy**

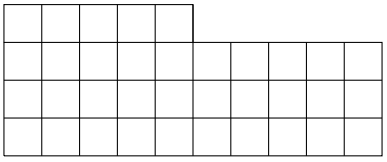
$70 \overset{+10}{\rightarrow} 80$ so $70 + 10 = 80$
ten more than seventy is **eighty**

$80 \overset{+10}{\rightarrow} 90$ so $80 + 10 = 90$
ten more than eighty is **ninety**

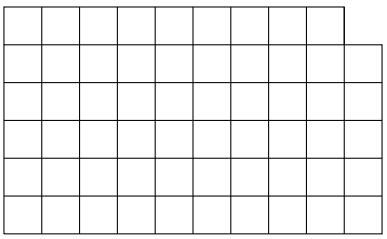
$90 \overset{+10}{\rightarrow} 100$ is the same as $90 + 10 = 100$
ten more than ninety **one hundred**



$20 + 1 = 21$
one more than twenty is **twenty-one**

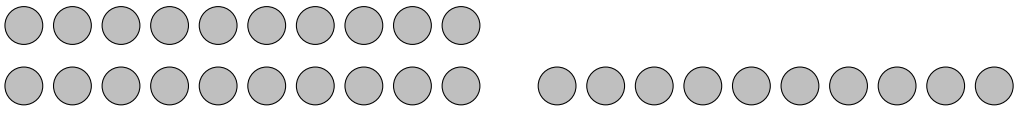


$30 + 5 = 35$
five more than twenty is **thirty-five**

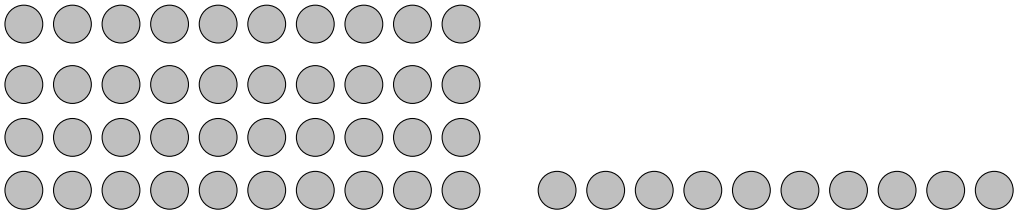


$50 + 9 = 59$
nine more than fifty is **fifty-nine**

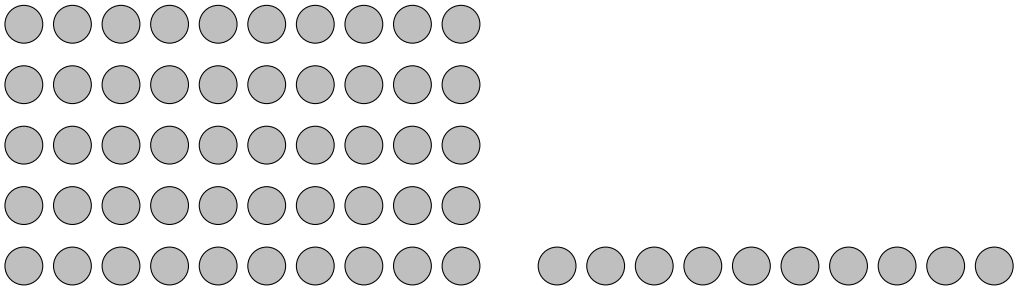
Exercise 248. *How many circles?*



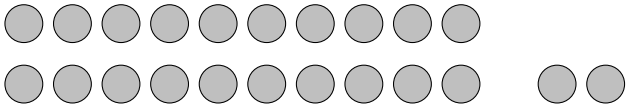
ten more than twenty is ..... so 20 + 10 = ..



ten more than fourty is ..... so 40 + 10 = ..

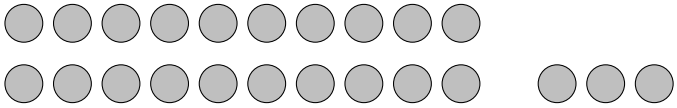


ten more than fifty is ..... so 50 + 10 = ..



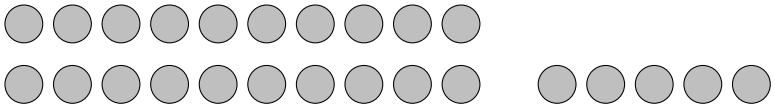
two more than twenty is twenty-two

so 20 + 2 = ..



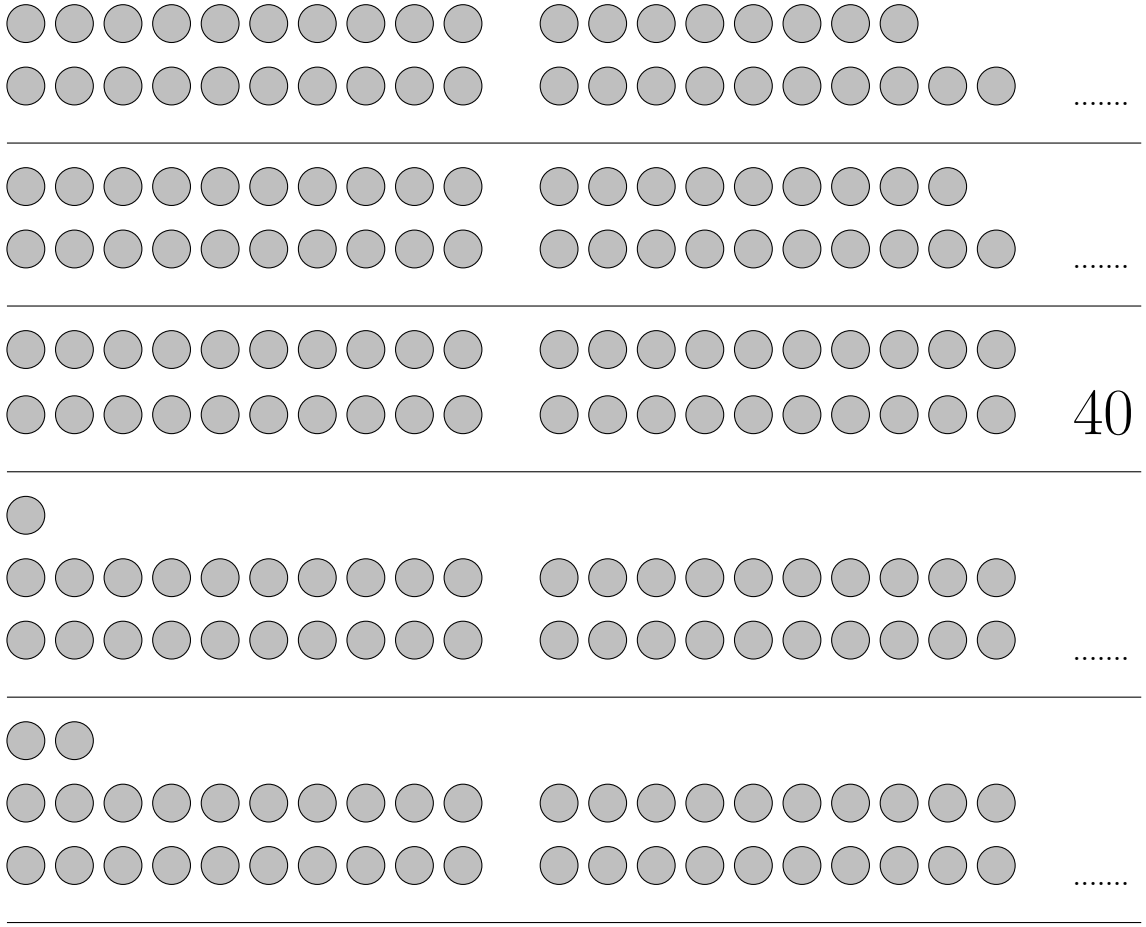
three more than twenty is .....

so 20 + 3 = ..



five more than twenty is .....

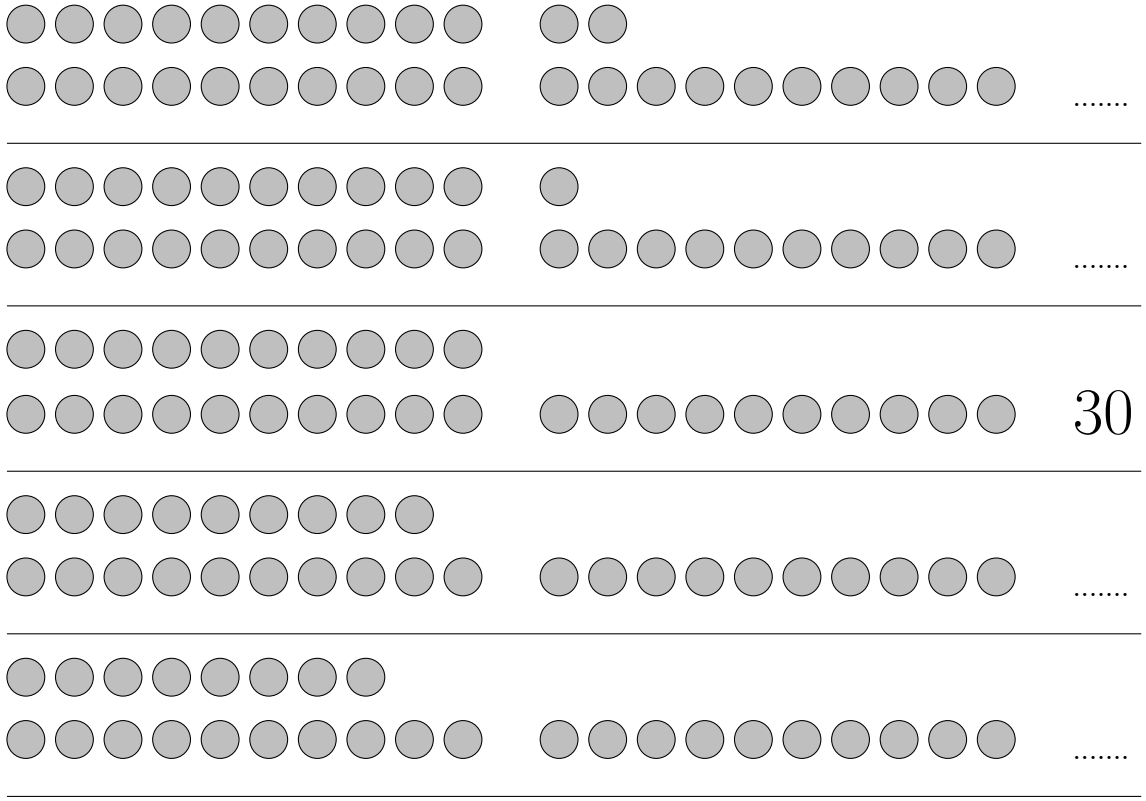
Exercise 249. *How many circles?*



Exercise 250. *Calculate and match*

$87 + 1 = ..$.	. eigty-eight
$88 + 1 = ..$.	. eigty-nine
$89 + 1 = ..$.	. ninety
$90 + 1 = ..$.	. ninety-one
$91 + 1 = ..$.	. ninety-two
$92 + 1 = ..$.	. ninety-three

Exercise 251. *How many circles?*



Exercise 252. *Calculate and match*

73 - 1 = .. •	• seventy-two
72 - 1 = .. •	• seventy-one
71 - 1 = .. •	• seventy
70 - 1 = .. •	• sixty-nine
69 - 1 = .. •	• sixty-eight
68 - 1 = .. •	• sixty-seven

Exercise 253. *Calculate and match*

$20 + 7 = ..$.	. ninty-five
$90 + 5 = ..$.	. eighty-six
$80 + 6 = ..$.	. twenty-seven
$40 + 4 = ..$.	. fifty-one
$20 + 10 = ..$.	. fourty-four
$50 + 1 = ..$.	. thirty

Exercise 254. *Calculate and match*

$60 + 2 = ..$.	. thirty-nine
$20 + 6 = ..$.	. sixty-two
$70 + 7 = ..$.	. twenty-six
$30 + 9 = ..$.	. seventy-seven
$80 + 10 = ..$.	. one hundred
$30 + 8 = ..$.	. ninty
$80 + 3 = ..$.	. twenty
$15 + 5 = ..$.	. thirty-eight
$90 + 10 = ..$.	. eighty-three

Exercise 255. *Complete.*

1	2								10
11									20
		23						29	
			34				38		
				45		47			
				55	56				
	62				56				
71									80
81									
91	92								100

Exercise 256. *Complete.*

twenty-five	25
fifty-two	
ninety-nine	
seventy-six	
eighty-one	
fourty-three	
thirty-eight	
sixty-four	

seventy-three	73
	37
	56
	89
	44
	61
	95
	50

Exercise 257. *Complete.*

- 1 more than 9 is .. , so $9 + 1 =$ ..
- 1 more than 19 is .. , so $19 + 1 =$ ..
- 1 more than 29 is .. , so $29 + 1 =$ ..
- 1 more than 39 is .. , so $39 + 1 =$ ..
- 1 more than 59 is .. , so $59 + 1 =$ ..
- 1 more than 69 is .. , so $69 + 1 =$ ..
- 1 more than 79 is .. , so $79 + 1 =$ ..
- 1 more than 89 is .. , so $89 + 1 =$ ..
- 1 more than 99 is ... , so $99 + 1 =$ ...

Exercise 258. *Complete.*

- 1 less than 10 is .. , so $10 - 1 =$ ..
- 1 less than 20 is .. , so $20 - 1 =$ ..
- 1 less than 30 is .. , so $30 - 1 =$ ..
- 1 less than 40 is .. , so $40 - 1 =$ ..
- 1 less than 50 is .. , so $50 - 1 =$ ..
- 1 less than 60 is .. , so $60 - 1 =$ ..
- 1 less than 70 is .. , so $70 - 1 =$ ..
- 1 less than 80 is .. , so $80 - 1 =$ ..
- 1 less than 90 is .. , so $90 - 1 =$ ..
- 1 less than 100 is .. , so $100 - 1 =$ ..

Exercise 259. *Complete and match*

$30 \overset{+10}{\rightarrow} \ldots$	.	. fourty
$35 \overset{+10}{\rightarrow} \ldots$	.	. twenty-seven
$22 \overset{+10}{\rightarrow} \ldots$	.	. fifty-five
$17 \overset{+10}{\rightarrow} \ldots$	.	. fourty-five
$45 \overset{+10}{\rightarrow} \ldots$	.	. thirty-two

Exercise 260. *Complete and match*

$33 \overset{-1}{\rightarrow} \ldots$	.	. twenty-seven
$26 \overset{+1}{\rightarrow} \ldots$	.	. fifty-five
$56 \overset{-1}{\rightarrow} \ldots$	.	. fourty-one
$40 \overset{+1}{\rightarrow} \ldots$	.	. thirty
$29 \overset{+1}{\rightarrow} \ldots$	.	. thirty-two

Exercise 261. *Write the number name.*

20 .....

21 .....

22 .....

33 .....

34 .....

45 .....

46 .....

57 .....

58 .....

69 .....

70 .....

71 .....

88 .....

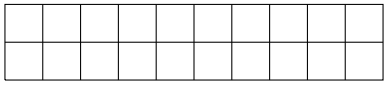
89 .....

90 .....

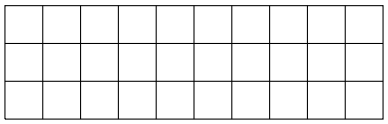
91 .....

4.2 Ones and tens

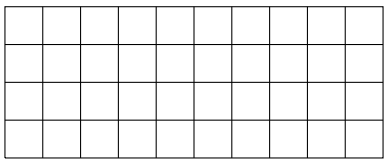
1 **ten** is the same as 10 **ones**



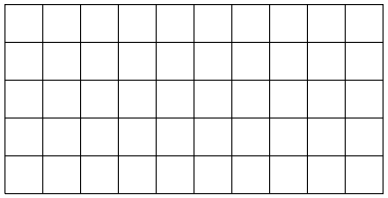
2 **tens** is the same as 20 **ones**



3 **tens** is the same as 30 **ones**



4 **tens** is the same as 40 **ones**



5 **tens** is the same as 50 **ones**

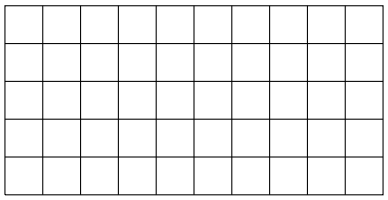
10 more than 50 is 60 , so 50 + 10 = 60

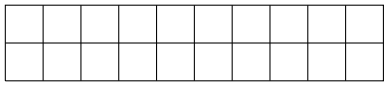
10 less than 60 is 50 , so 60 - 10 = 50

1 ten more than 5 tens is 6 tens, so 50 + 10 =60

1 ten less than 6 tens is 5 tens, so 60 - 10 = 50

Exercise 262. *Complete.*



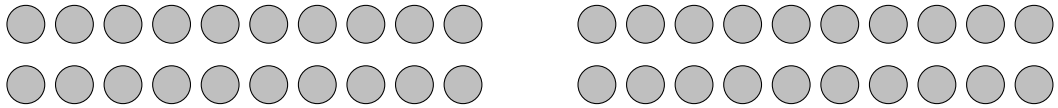


5 tens and 2 tens is equal to .. tens

50 + 20 = .. $50 \overset{+20}{\rightarrow}$ ..

7 **tens** is the same as .. **ones**

Exercise 263. *Complete.*

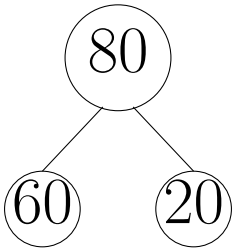


2 tens is the same as .. ones
2 tens and 2 tens is equal to .. tens

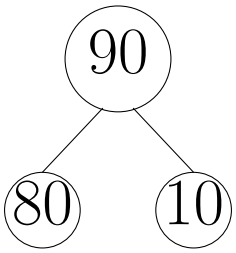
$20 + 20 = ..$ $20 \overset{+20}{\rightarrow} ..$

4 tens is the same as .. ones

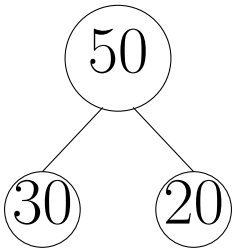
Exercise 264. *Complete.*



2 tens more than 6 tens is .. tens
2 tens less than 8 tens is .. tens

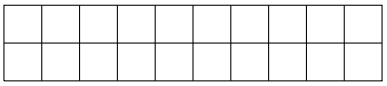


1 ten more than 8 tens is .. tens
1 ten less than 9 tens is .. tens



2 tens more than 3 tens is .. tens
2 tens less than 5 tens is .. tens

Exercise 265. *Complete.*



tens	ones
2	3

2 **tens** and 3 **ones** is the same as 23 **ones**

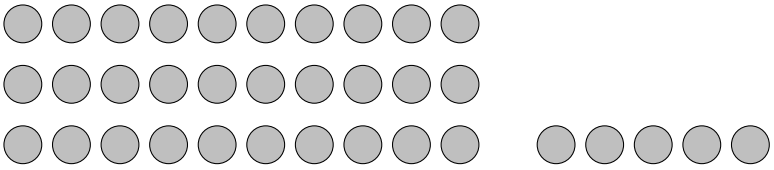
1 more than 23 is .. , so 23 + 1 = 24

1 less than 23 is 22 , so 23 - 1 = ..

10 more than 23 is 33 , so 23 + 10 = ..

10 less than 23 is .. , so 23 - 10 = 13

Exercise 266. *Complete.*



tens	ones

3 **tens** and 5 **ones** is the same as .. **ones**

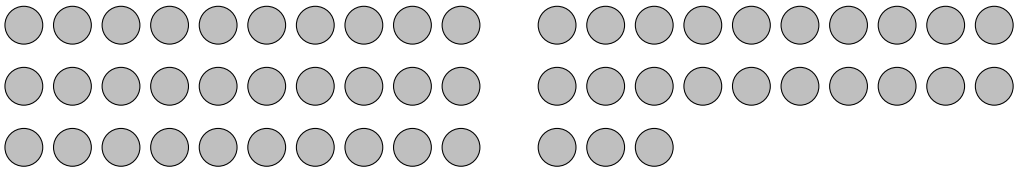
1 more than 35 is .. , so 35 + 1 = ..

1 less than 35 is .. , so 35 - 1 = ..

10 more than 35 is 45 , so 35 + 10 = ..

10 less than 35 is 25 , so 35 - 10 = ..

Exercise 267. *Complete.*



tens	ones

5 **tens** and 3 **ones** is the same as .. **ones**

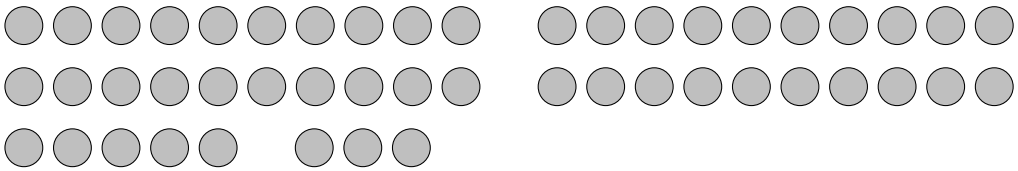
1 more than 53 is .. , so 53 + 1 = ..

1 less than 53 is .. , so 53 - 1 = ..

10 more than 53 is .. , so 53 + 10 = ..

10 less than 53 is 43 , so 53 - 10 = ..

Exercise 268. *Complete.*



tens	ones

4 **tens** and 8 **ones** is the same as .. **ones**

8 more than 40 is .. , so 40 + 8 = ..

8 less than 48 is .. , so 48 -8 = ..

10 more than 48 is .. , so 48 + 10 = ..

10 less than 48 is .. , so 48 - 10 = ..

Exercise 269. *Calcul and match*

$50 + 7 = \ldots$ •

$29 + 1 = \ldots$ •

$33 + 1 = \ldots$ •

$89 + 1 = \ldots$ •

•

tens	ones
9	0

•

tens	ones
5	7

•

tens	ones
3	0

•

tens	ones
3	4

Exercise 270. *Calcul and match*

$59 + 10 = \ldots$ •

$79 + 10 = \ldots$ •

$33 + 10 = \ldots$ •

$89 + 10 = \ldots$ •

•

tens	ones
8	9

•

tens	ones
6	9

•

tens	ones
9	9

•

tens	ones
4	3

Exercise 271. *Calcul and match*

21 - 1 = .. •

59 - 1 = .. •

10 - 1 = .. •

40 - 1 = .. •

•

tens	ones
5	8

•

tens	ones
2	0

•

tens	ones
3	9

•

tens	ones
0	9

Exercise 272. *Calcul and match*

55 - 10 = .. •

80 - 10 = .. •

61 - 10 = .. •

89 - 10 = .. •

•

tens	ones
7	9

•

tens	ones
4	5

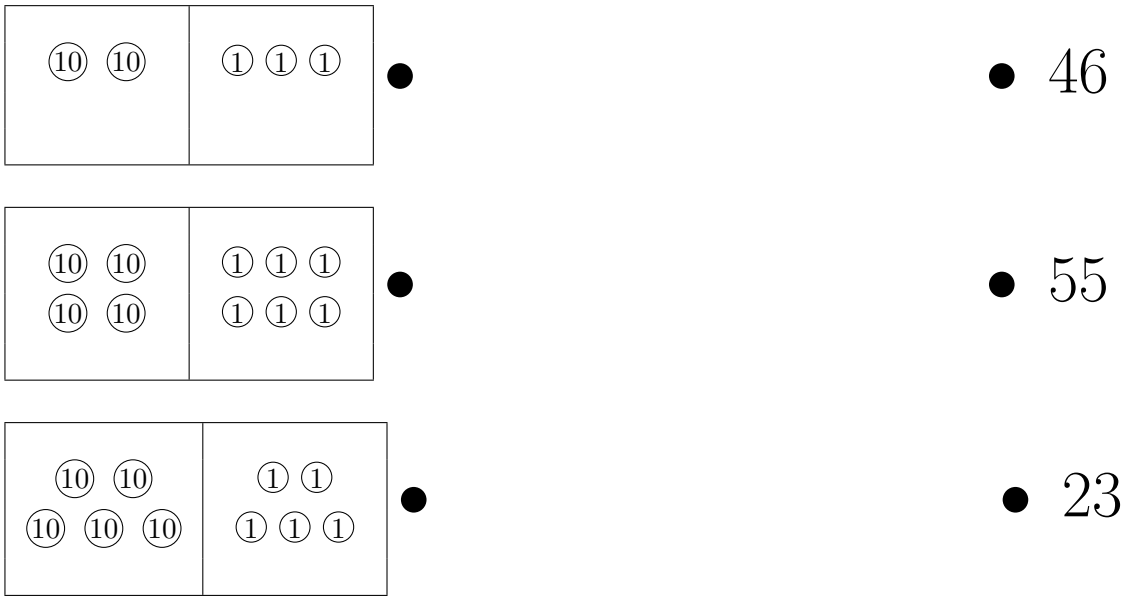
•

tens	ones
7	0

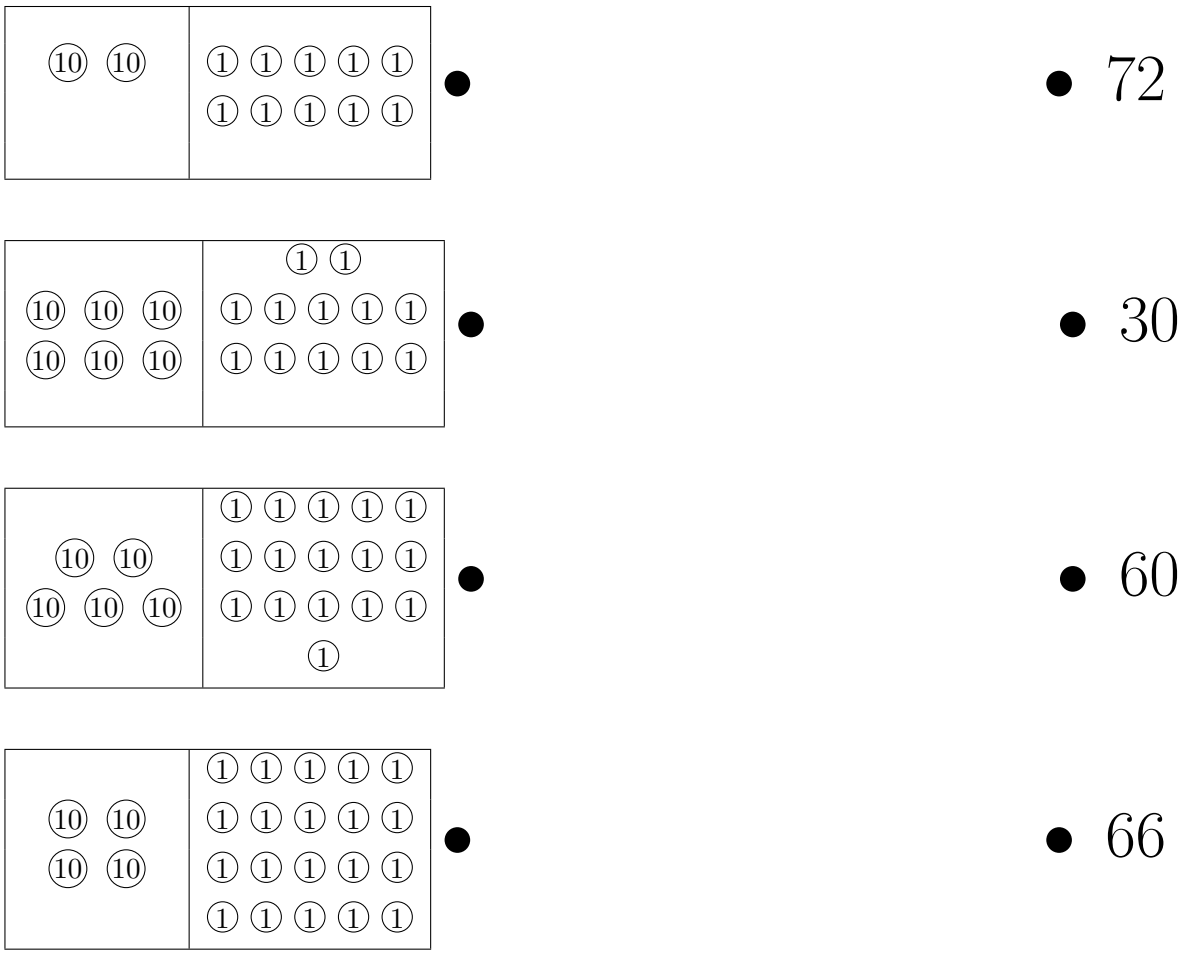
•

tens	ones
5	1

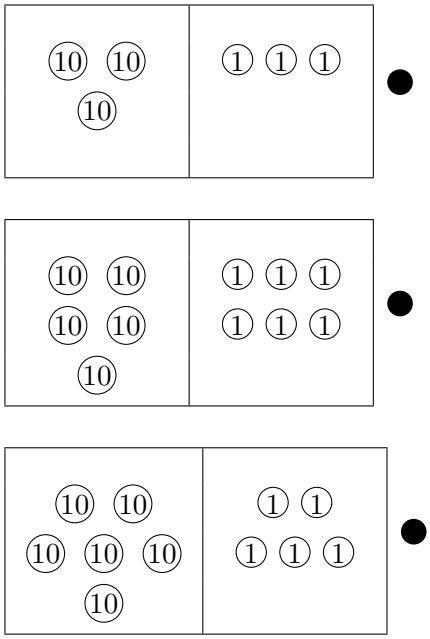
Exercise 273. *Match*



Exercise 274. *Match*



Exercise 275. *Match*

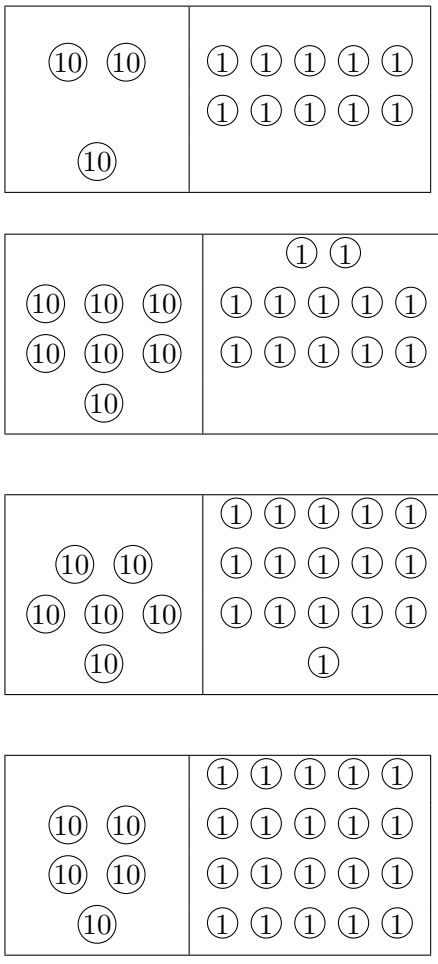


tens	ones
5	6

tens	ones
6	5

tens	ones
3	3

Exercise 276. *Match*



tens	ones
8	2

tens	ones
4	0

tens	ones
7	0

tens	ones
7	6

4.3 Pattern

Exercise 277. *Complete the pattern.*

10	20	30	10	20	30						
20	30	40	20	30	40						
30	40	50	30	40	50						
40	50	60	40	50	60						
50	60	70	50	60	70						
70	80	90	70	80	90						
80	90	100	80	90	100						

Exercise 278. *Complete the pattern.*

19	20	21	19	20	21						
29	30	31	29	30	31						
39	40	41	39	40	41						
49	50	51	49	50	51						
59	60	61	59	60	61						

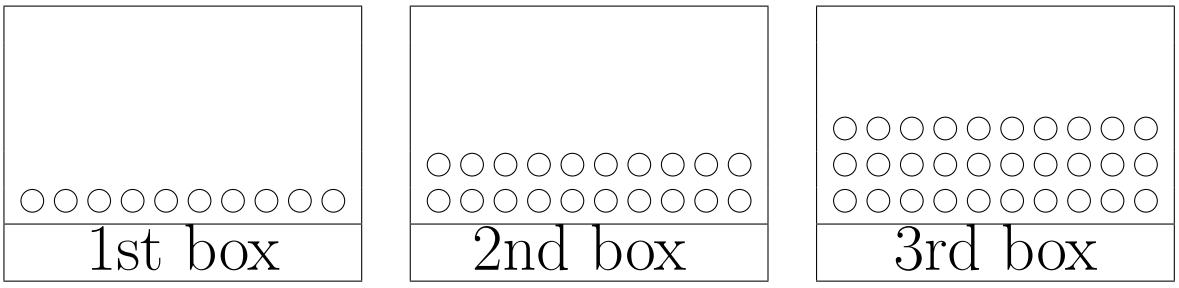
Exercise 279. *Complete the pattern.*

69	70	71	69	70	71						
79	80	81	79	80	81						
89	90	91	89	90	91						
99	100	99	100								

Exercise 280. *Complete the pattern.*

100	90	100	90								
90	80	90	80								
80	70	80	70								
70	60	70	60								
60	50	60	50								
50	40	50	40								
40	30	40	30								
30	20	30	20								

Exercise 281.



How many balls in the first box?

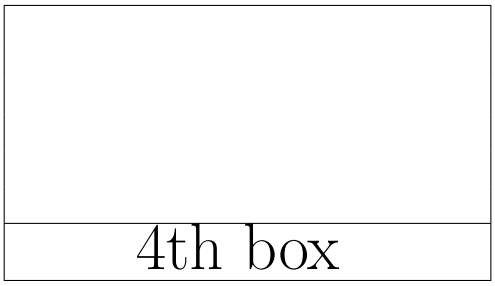
.....

How many balls in the second box?

.....

The rule of pattern is : + 10

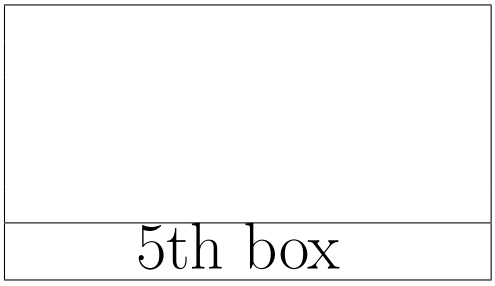
Draw balls in the fourth box



How many balls will there be in the fourth box?

.....

Draw balls in the fifth box



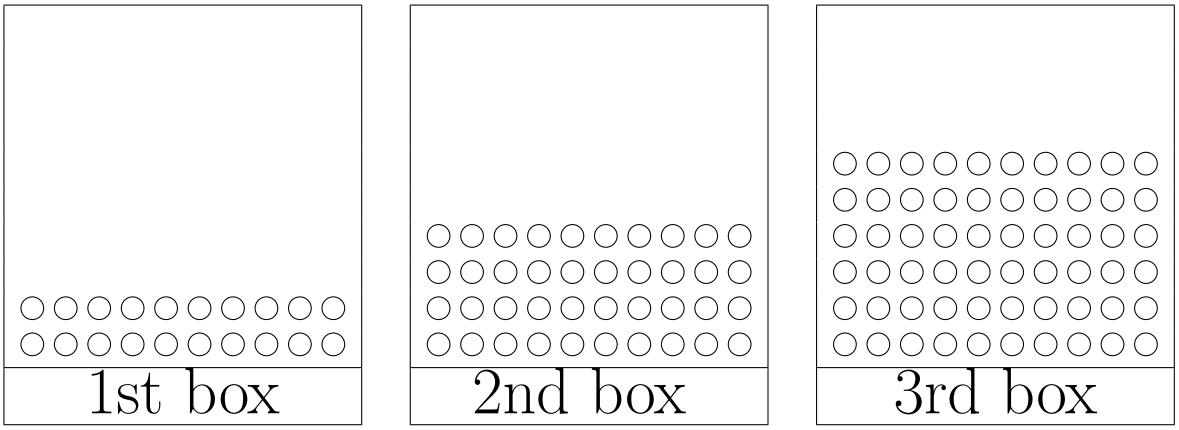
How many balls will there be in the fifth box?

.....

How many balls will there be in the sixth box?

.....

Exercise 282.



How many tens (of balls) in the first box?

.....

How many tens (of balls) in the second box?

.....

How many tens (of balls) in the third box?

.....

The pattern continues

How many tens will there be in the fourth box?

.....

How many balls will there be in the fourth box?

.....

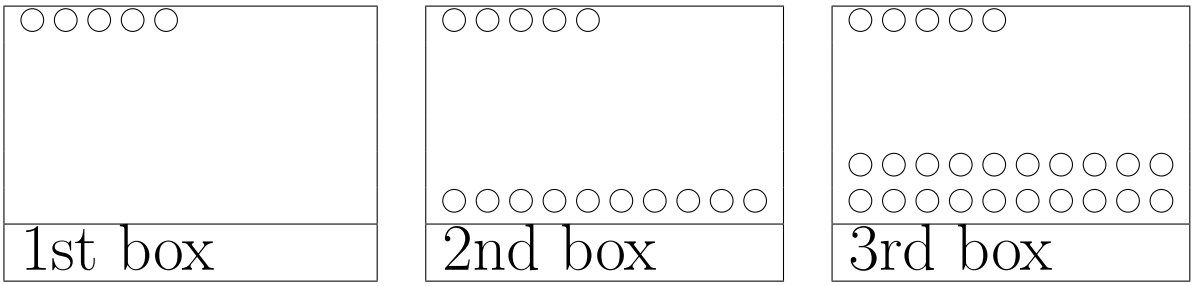
How many tens will there be in the fifth box?

.....

How many balls will there be in the fifth box?

.....

Exercise 283.



How many tens in the first box?

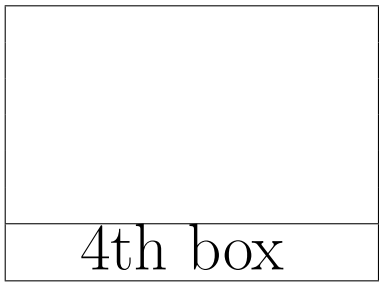
.....

How many balls in the second box?

.....

The pattern continues

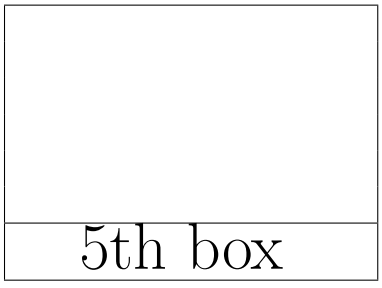
Draw balls in the fourth box



How many balls will there be in the fourth box?

.....

Draw balls in the fifth box



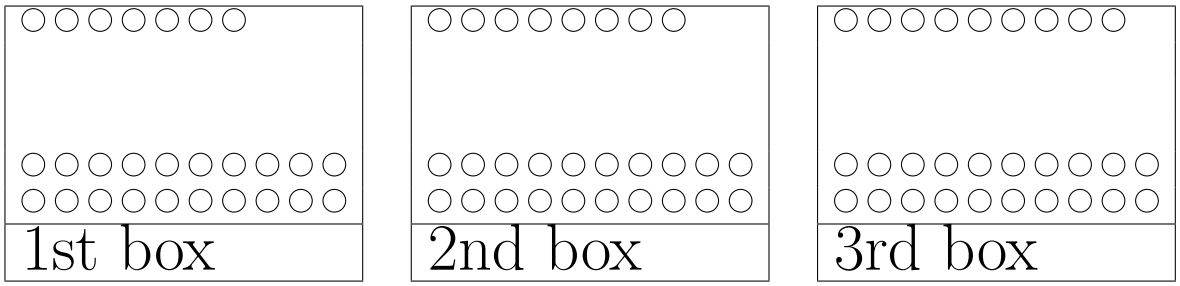
How many balls will there be in the fifth box?

.....

How many balls will there be in the sixth box?

.....

Exercise 284.



How many tens in the first box?

.....

How many balls in the second box?

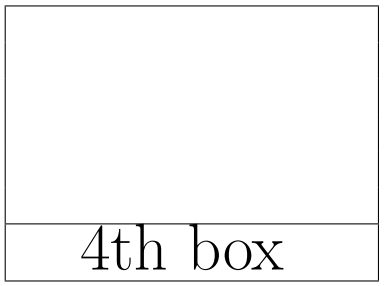
.....

How many balls in the third box?

.....

The pattern continues

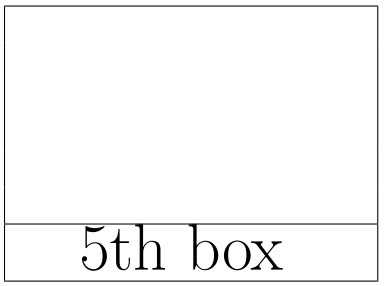
Draw balls in the fourth box



How many tens will there be in the fourth box?

.....

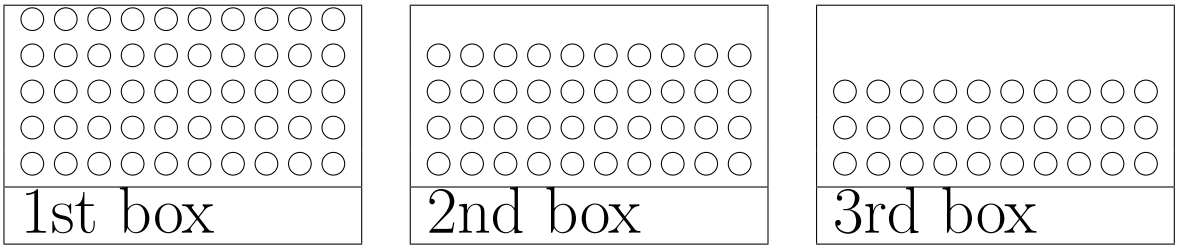
Draw balls in the fifth box



How many balls will there be in the fifth box?

.....

Exercise 285.



How many tens in the first box?

.....

How many tens in the second box?

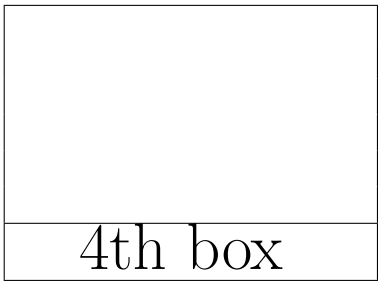
.....

How many tens in the third box?

.....

The pattern continues

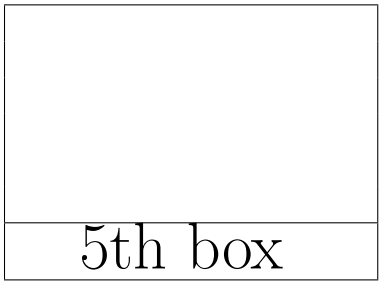
Draw balls in the fourth box



How many tens will there be in the fourth box?

.....

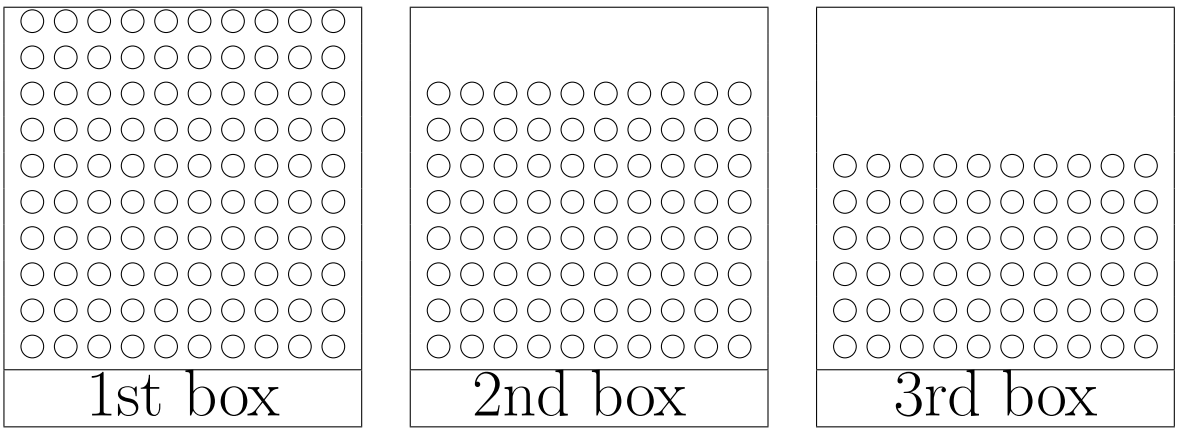
Draw balls in the fifth box



How many balls will there be in the sixth box?

.....

Exercise 286.



How many tens (of balls) in the first box?

.....

How many tens (of balls) in the second box?

.....

How many tens (of balls) in the third box?

.....

The pattern continues

How many tens will there be in the fourth box?

.....

How many tens will there be in the fifth box?

.....

How many balls will there be in the fifth box?

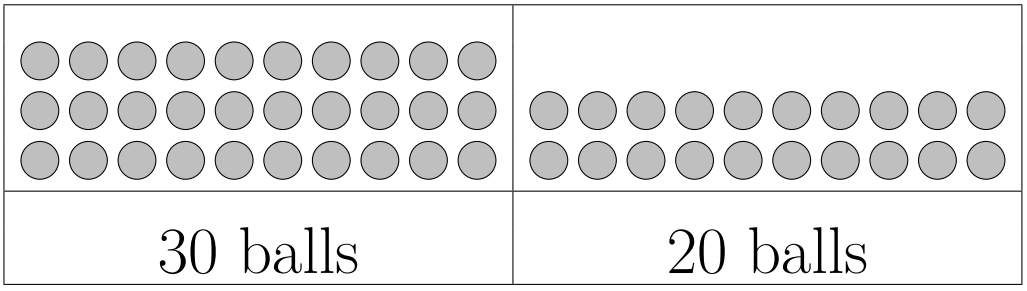
.....

How many balls will there be in the sixth box?

.....

4.4 Comparison

Exercise 287. *Fill in the blanks with greater, less, > or <*



30 balls	20 balls

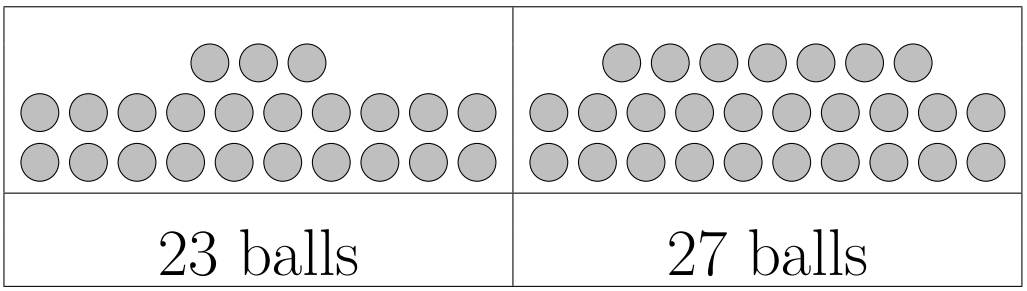
thirty is ..... than twenty so 30 .. 20

3 tens is ..... than 2 tens

twenty is ..... than thirty so 20 .. 30

2 tens is ..... than 3 tens

Exercise 288. *Fill in the blanks with greater, less, > or <*



23 balls	27 balls

twenty-three is ..... than twenty-seven

so 23 .. 27

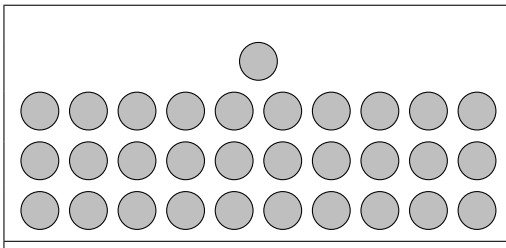
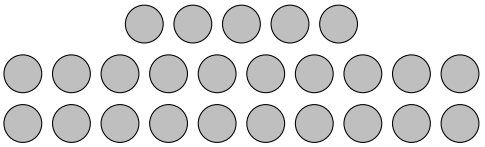
2 tens 3 ones is ..... than 2 tens 7 ones

twenty-seven is ..... than thirty-three

so 27 .. 23

2 tens seven ones is ..... than 2 tens 3 ones

Exercise 289. *Fill in the blanks with greater, less, > or <*

	
31 balls	25 balls

tirty-one is ..... than twenty-five

so 31 .. 25

3 tens 1 one is ..... than 2 tens 5 ones

twenty-five is ..... than thirty-one

so 25 .. 31

2 tens 5 ones is ..... than 3 tens 1 one

Exercise 290. *Fill in the blanks with =, > or <*

17 .. 59	20 + 10 .. 30
93 .. 39	57 + 10 .. 57
60 .. 70	53 + 1 .. 52
55 .. 48	53 - 1 .. 52
77 .. 75	20 - 10 .. 30
57 .. 87	89 + 1 .. 90
99 .. 11	90 - 10 .. 70

Exercise 291. *Fill in the blanks with* ***equal to****,* ***greater than*** *or* ***less than***

2 tens 8 ones 82

fifty-one 49

2 tens 8 ones 28

sixty-two 61

5 tens 3 ones 36

5 ones 7 tens 57

Exercise 292. *Fill in the blanks with* $=$*,* $>$ *or* $<$

$10 + 10 \;..\; 15 + 5$	$2 + 18 \;..\; 11 + 9$
$90 + 3 \;..\; 39 + 1$	$19 + 1 \;..\; 21 - 1$
$60 + 10 \;..\; 80 - 10$	$57 + 1 \;..\; 60 - 1$
$55 - 1 \;..\; 48 + 10$	$59 + 1 \;..\; 91 - 1$
$77 - 7 \;..\; 75 - 5$	$20 - 10 \;..\; 30$
$7 + 3 \;..\; 8 + 2$	$29 + 1 \;..\; 20 + 10$
$17 + 3 \;..\; 16 + 4$	$10 - 10 \;..\; 20 - 20$

Exercise 293. *Circle the least (smallest) number.*

(a) | 52 | 28 | 19 |

(b) | 49 | 50 | 51 |

(c) | 50 | 20 | 90 |

(d) | 70 | 69 | 68 |

Exercise 294. *Circle the greatest (biggest) number*

(a) | 52 | 78 | 19 |

(b) | 49 | 50 | 51 |

(c) | 35 | 45 | 55 |

(d) | 70 | 69 | 68 |

Exercise 295. *Arrange the numbers in ascending order. (from least to greatest)*

(a) | 5 | 78 | 19 | ☐ ☐ ☐

(b) | 70 | 60 | 65 | ☐ ☐ ☐

(c) | 25 | 30 | 20 | ☐ ☐ ☐

(d) | 70 | 71 | 69 | ☐ ☐ ☐

Exercise 296. *Arrange the numbers in descending order. (from greatest to least)*

(a) | 10 | 78 | 29 | → | | | |

(b) | 37 | 40 | 30 | → | | | |

(c) | 19 | 20 | 21 | → | | | |

(d) | 60 | 80 | 70 | → | | | |

Exercise 297. *Arrange the numbers in ascending order. (from least to greatest)*

(a) | 90 | 35 | 30 | 13 | 50 | → | | | | | |

(b) | 10 | 20 | 30 | 15 | 27 | → | | | | | |

(c) | 52 | 50 | 59 | 60 | 55 | → | | | | | |

(d) | 11 | 35 | 21 | 19 | 20 | → | | | | | |

Exercise 298. *Write the missing number in each sequence.*

(a) | 7 | 8 | 9 | |

(b) | 27 | 28 | 29 | |

(c) | 58 | 59 | 60 | |

(d) | 89 | 90 | 91 | |

Exercise 299. *Write the missing number in each sequence.*

(a) | 12 | 11 | 10 | |

(b) | 21 | 20 | 19 | |

(c) | 53 | 52 | 51 | |

(d) | 92 | 91 | 90 | |

Exercise 300. *Write the missing number in each sequence.*

(a) | 10 | 20 | 30 | |

(b) | 50 | 60 | 70 | |

(c) | 37 | 47 | 57 | |

(d) | 65 | 75 | 85 | |

Exercise 301. *Write the missing number in each sequence.*

(a) | 40 | 30 | 20 | |

(b) | 90 | 80 | 70 | |

(c) | 65 | 55 | 45 | |

(d) | 91 | 81 | 71 | |

Exercise 302. *Place the numbers in order between the tens.*

37, 45, 23, 19

10		20		30		40		50

Exercise 303. *Place the numbers in order between the tens.*

85, 66, 53, 77

50		60		70		80		90

Exercise 304. *Place the numbers in order between the tens.*

61, 55, 49, 32

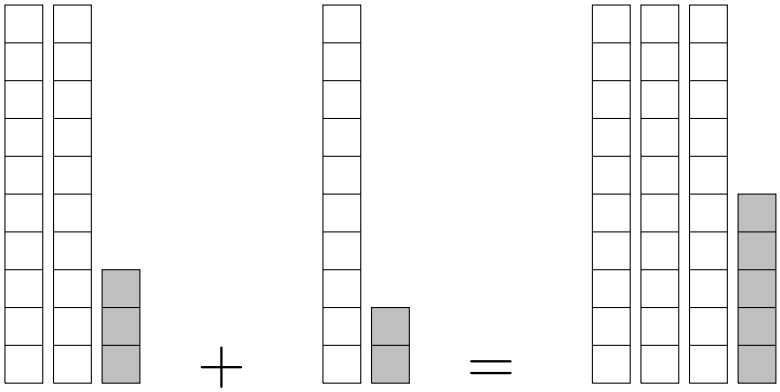
30		40		50		60		70

Exercise 305. *Place the numbers in order between the tens.*

35, 5, 15, 25

0		10		20		30		40

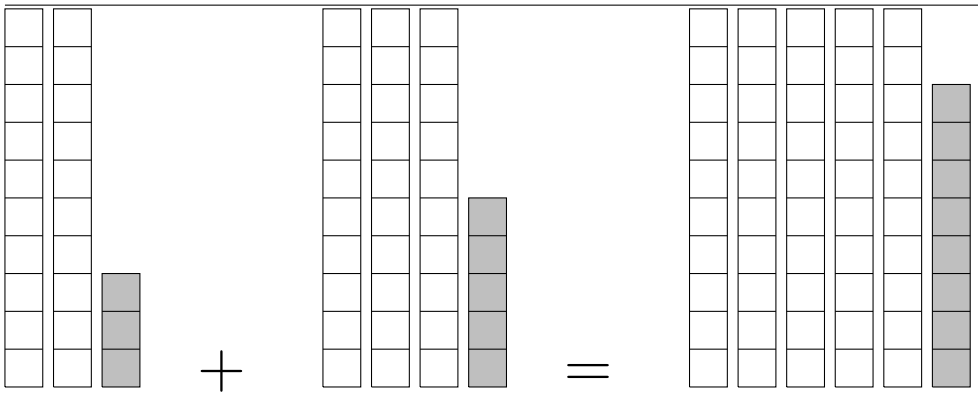
4.5 Addition



2 tens 3 ones + 1 ten 2 ones = 3 tens 5 ones.

$$23 + 12 = 35.$$

$$23 \overset{+10}{\rightarrow} 33 \overset{+2}{\rightarrow} 35$$



2 tens 3 ones + 3 ten 5 ones = 5 tens 8 ones.

$$23 + 35 = 58$$

$$23 \overset{+30}{\rightarrow} 53 \overset{+5}{\rightarrow} 58$$

Exercise 306. *Calculate*

$23 + 11 =$	$34 + 55 =$
$61 + 21 =$	$13 + 16 =$

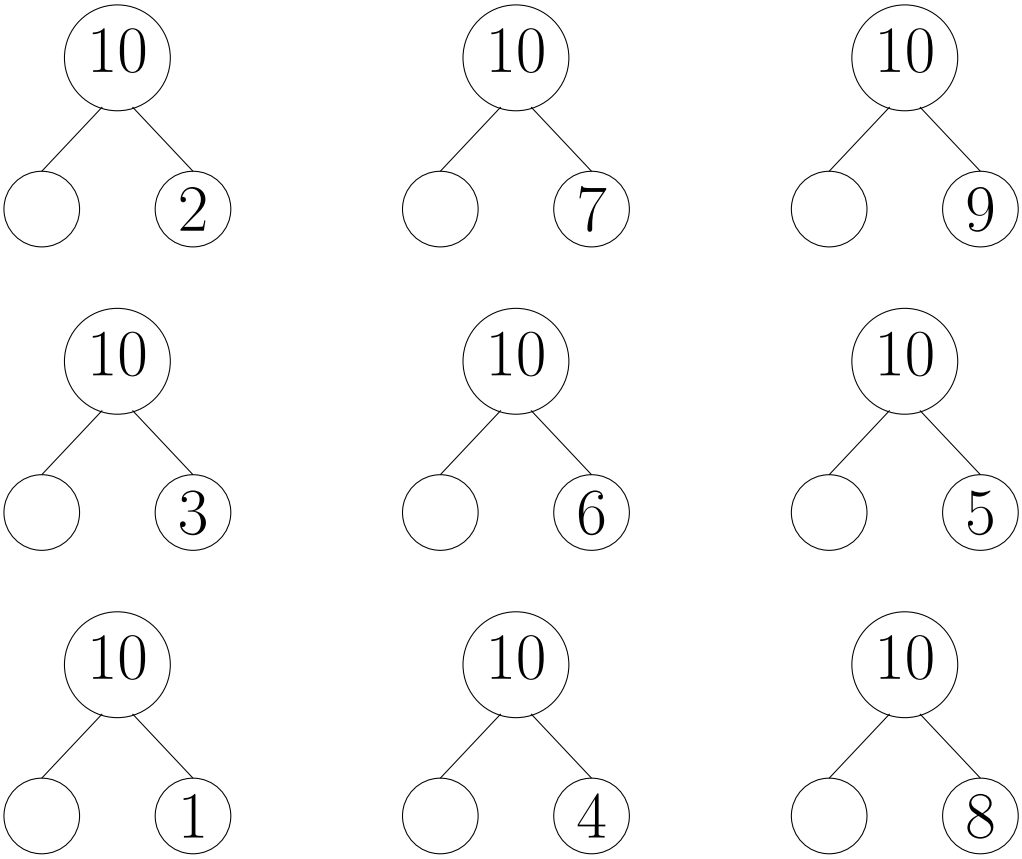
Exercise 307. *Calculate*

$7 + 3 =$	$4 + 6 =$	$9 + 1 =$
$8 + 2 =$	$5 + 5 =$	$9 + 0 =$

Exercise 308. *Calculate*

$2 + 8 + 5 =$	$5 + 5 + 7 =$
$7 + 3 + 8 =$	$9 + 1 + 7 =$
$6 + 4 + 3 =$	$2 + 5 + 8 =$

Exercise 309. *Complete*



Exercise 310. *Complete*

$3 + .. = 5$	$1 + .. = 6$	$2 + .. = 3$
$1 + .. = 7$	$2 + .. = 7$	$3 + .. = 6$

Exercise 311. *Calculate*

$5 + \underset{\wedge}{6} = \cdots$ $\quad$ $8 + \underset{\wedge}{3} = \cdots$

$7 + \underset{\wedge}{6} = \cdots$ $\quad$ $9 + \underset{\wedge}{5} = \cdots$

$8 + \underset{\wedge}{6} = \cdots$ $\quad$ $7 + \underset{\wedge}{5} = \cdots$

$9 + \underset{\wedge}{6} = \cdots$ $\quad$ $7 + \underset{\wedge}{4} = \cdots$

$8 + \underset{\wedge}{7} = \cdots$ $\quad$ $9 + \underset{\wedge}{8} = \cdots$

$7 + \underset{\wedge}{7} = \cdots$ $\quad$ $6 + \underset{\wedge}{6} = \cdots$

$8 + \underset{\wedge}{8} = \cdots$ $\quad$ $9 + \underset{\wedge}{9} = \cdots$

Exercise 312. *Calculate*

$72 + 3 =$	$65 + 2 =$	$22 + 7 =$
$17 + 3 =$	$91 + 7 =$	$43 + 2 =$

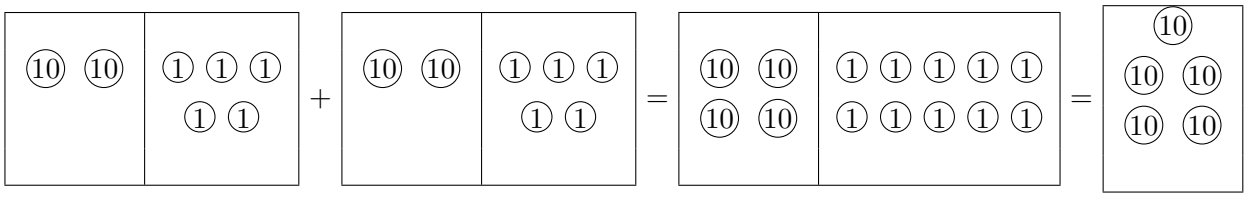
Exercise 313. *Calculate*

$12 + 23 =$	$65 + 32 =$	$51 + 25 =$
$38 + 41 =$	$32 + 66 =$	$43 + 45 =$

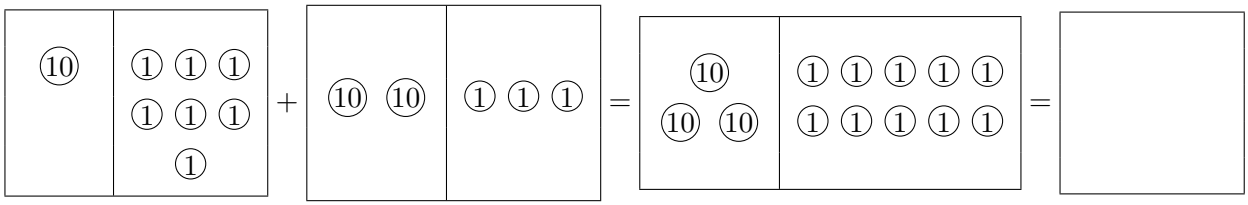
Exercise 314. *Complete*

$1 + .. = 57$	$2 + .. = 16$	$3 + .. = 53$
$4 + .. = 74$	$2 + .. = 66$	$3 + .. = 34$
$2 + .. = 24$	$5 + .. = 26$	$4 + .. = 18$
$50 + .. = 60$	$22 + .. = 32$	$20 + .. = 50$
$30 + .. = 37$	$16 + .. = 20$	$35 + .. = 45$

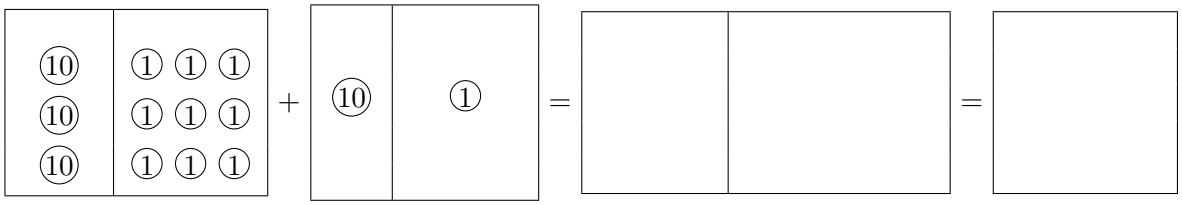
Exercise 315. *Draw and add.*



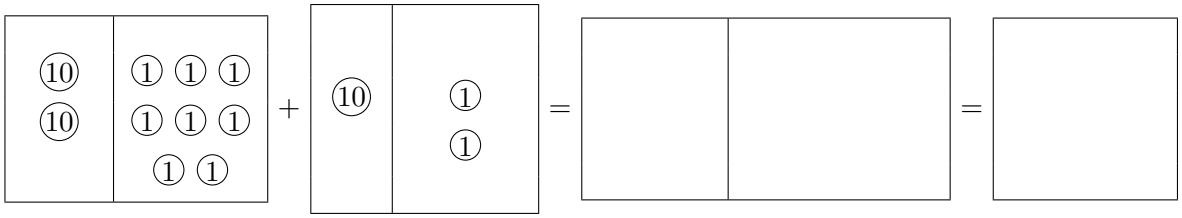
So 25 + 25 = ..



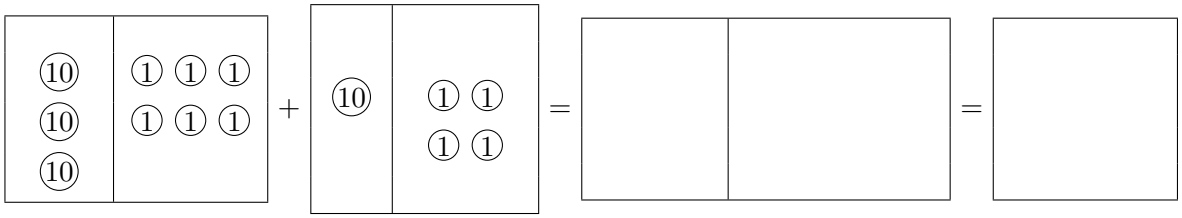
So 17 + 23 = ..



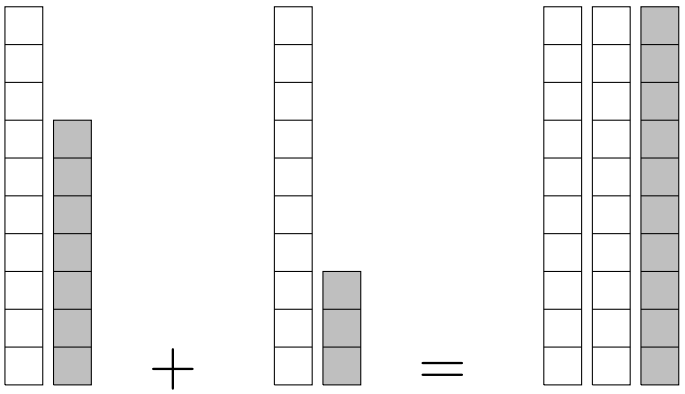
So 39 + 11 = ..



So 28 + 12 = ..



So 36 + 14 = ..

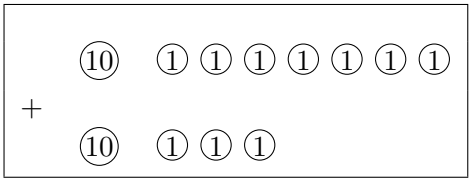


1 tens 7 ones + 1 ten 3 ones = 3 tens.

$$17 + 13 = 30$$

7 ones + 3 ones = 10 ones.

	tens	ones
	1	7
+	1	3
=	2	10
=	3	0



$$\begin{array}{r} {\scriptstyle 1} \\ 17 \\ +\ 13 \\ \hline = 30 \end{array}$$

$17+13=20 + 10 = 30$

$3 \quad 10$

$17 \overset{+3}{\rightarrow} 20 \overset{+10}{\rightarrow} 30$

Exercise 316. *Calculate*

$29+21=$ $\qquad$ $26+44=$

$8+52=$ $\qquad$ $17+33=$

Exercise 317. *Complete*

(a) $19 \overset{+1}{\rightarrow} 20 \overset{+10}{\rightarrow} 30$ so $19 + 11 = ..$

(b) $25 \overset{+5}{\rightarrow} 30 \overset{+20}{\rightarrow} ..$ so $25 + 25 = ..$

(c) $27 \overset{+3}{\rightarrow} 30 \overset{+40}{\rightarrow} ..$ so $27 + 43 = ..$

(d) $49 \overset{+1}{\rightarrow} 50 \overset{+30}{\rightarrow} ..$ so $49 + 31 = ..$

Exercise 318. *Complete the arrow way to add*

(a) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $38 + 12 = ..$

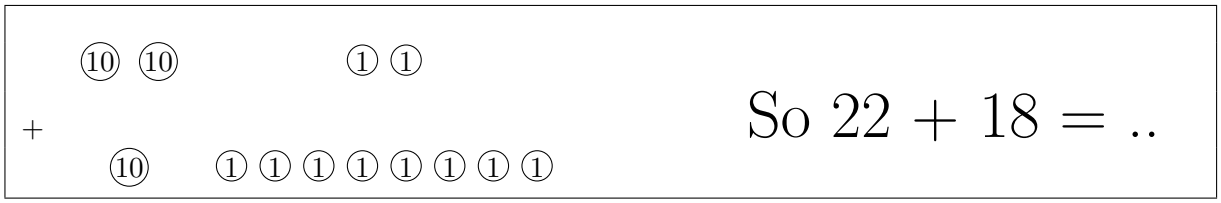
(b) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $59 + 11 = ..$

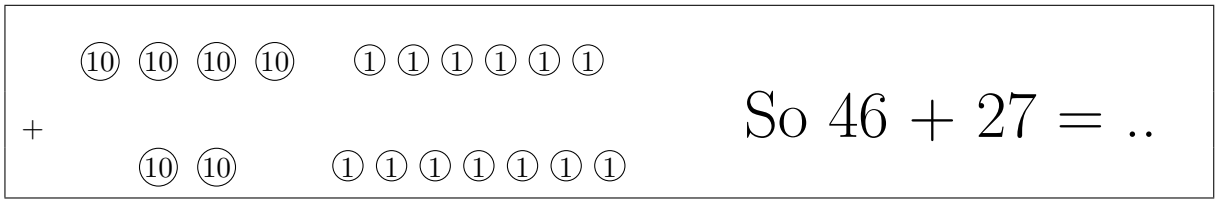
(c) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $17 + 23 = ..$

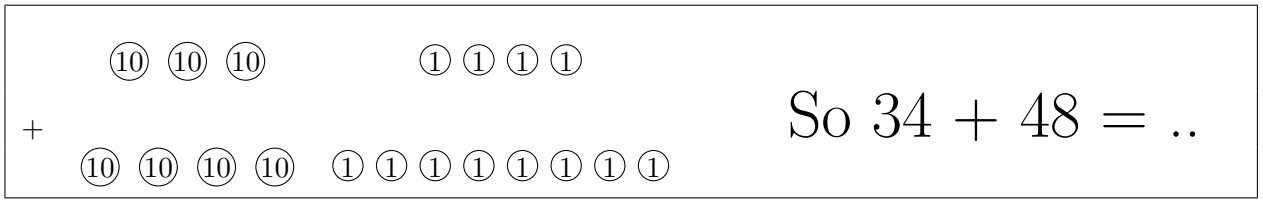
(d) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $36 + 24 = ..$

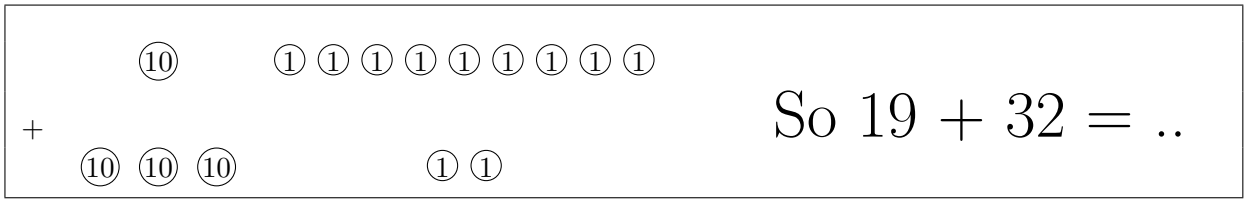
(e) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $25 + 15 = ..$

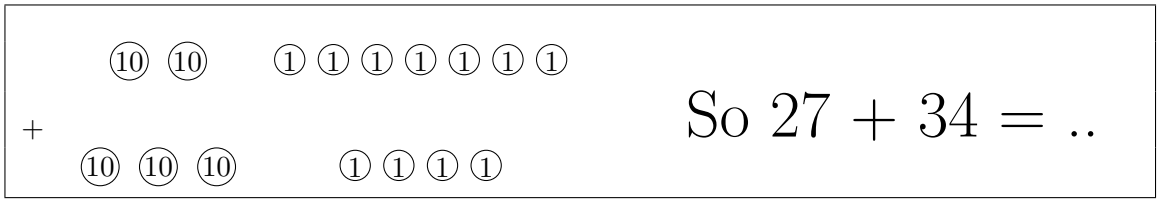
Exercise 319. *Circle ten ones and add*

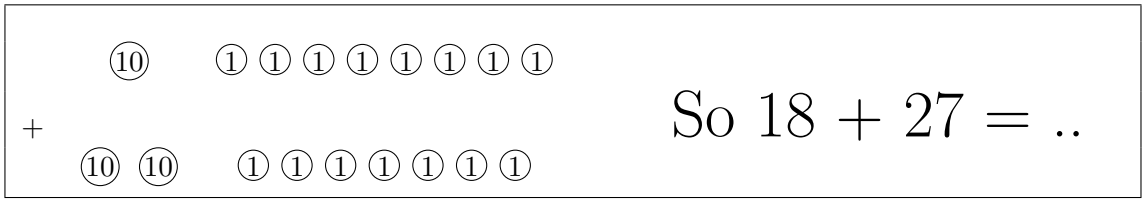


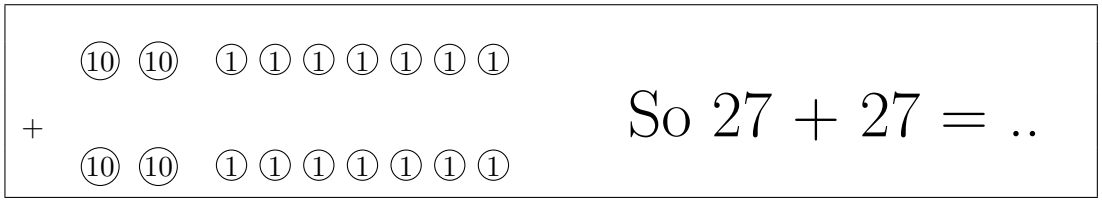












Exercise 320. *Draw tens and ones. Circle ten ones to add*

+ So $15 + 15 =$ ..

+ So $27 + 13 =$ ..

+ So $39 + 21 =$ ..

+ So $28 + 52 =$ ..

+ So $19 + 11 =$ ..

+ So $35 + 35 =$ ..

+ So $36 + 14 =$ ..

Exercise 321. *Draw tens and ones. Circle ten ones to add*

+ So $28 + 15 = ..$

+ So $19 + 13 = ..$

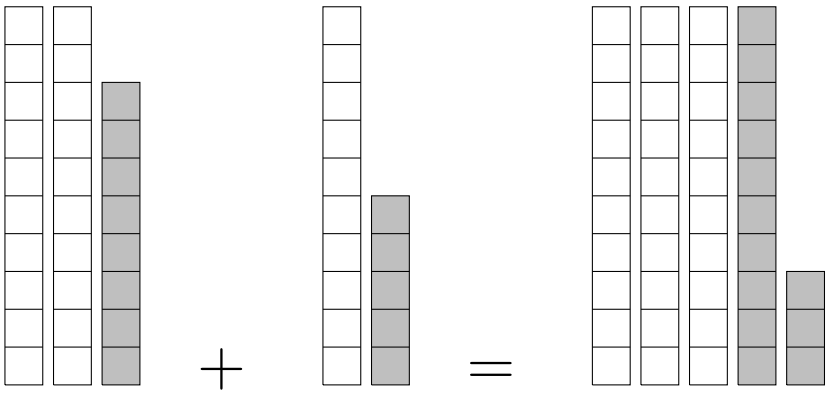
+ So $28 + 26 = ..$

+ So $57 + 14 = ..$

+ So $19 + 32 = ..$

+ So $36 + 36 = ..$

+ So $48 + 27 = ..$



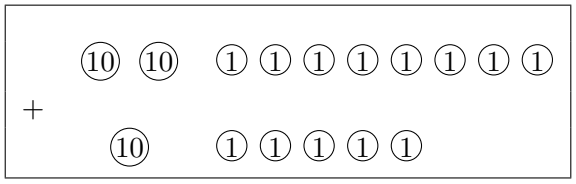
2 tens 8 ones + 1 ten 5 ones = 4 tens 3 ones.

$$28 + 15 = 43$$

8 ones + 5 ones = 13 ones.

8 ones + 5 ones = 1 ten 3 ones.

	tens	ones
	2	8
+	1	5
=	3	13
=	4	3



$$\begin{array}{r} {\scriptstyle 1} \\ 28 \\ +\ 15 \\ \hline = \ 43 \end{array}$$

$28+15=30 + 13 = 43$

$2 \quad 13$

$28 \overset{+2}{\rightarrow} 30 \overset{+13}{\rightarrow} 43$

Exercise 322. *Calculate*

$29+25=$ $\qquad$ $25+16=$

$8 +54=$ $\qquad$ $17+35=$

Exercise 323. *Circle ten ones and add.*

⑩ ⑩ ① ① ① ① ① ① ① + ⑩ ⑩ ① ① ① ①	27 + 24 = ..

⑩ ⑩ ⑩ ⑩ ⑩ ① ① ① ① + ⑩ ① ① ① ① ① ① ① ① ①	54 + 19 = ..

⑩ ⑩ ⑩ ① ① ① ① ① + ⑩ ⑩ ① ① ① ① ①	35 + 25 = ..

⑩ ⑩ ① ① ① ① ① ① ① ① + ⑩ ⑩ ① ① ① ① ① ① ① ①	28 + 28 = ..

⑩ ⑩ ⑩ ① ① ① ① ① ① ① + ⑩ ⑩ ⑩ ⑩ ① ① ① ① ① ①	37 + 46 = ..

⑩ ⑩ ⑩ ⑩ ⑩ ⑩ ① ① + ⑩ ⑩ ① ① ① ① ① ① ① ①	62 + 28 = ..

Exercise 324. *Draw tens and ones then circle ten ones to add.*

+	$\begin{array}{r} 17 \\ +\ 13 \\ \hline = \ .. \end{array}$
+	$\begin{array}{r} 54 \\ +\ 27 \\ \hline = \ .. \end{array}$
+	$\begin{array}{r} 64 \\ +\ 29 \\ \hline = \ .. \end{array}$
+	$\begin{array}{r} 27 \\ +\ 27 \\ \hline = \ .. \end{array}$
+	$\begin{array}{r} 54 \\ +\ 18 \\ \hline = \ .. \end{array}$
+	$\begin{array}{r} 35 \\ +\ 35 \\ \hline = \ .. \end{array}$

Exercise 325. *Complete*

(a) $19 \overset{+1}{\to} 20 \overset{+11}{\to} 31$ so $19 + 12 = ..$

(b) $25 \overset{+5}{\to} 30 \overset{+21}{\to} ..$ so $25 + 26 = ..$

(c) $27 \overset{+3}{\to} 30 \overset{+42}{\to} ..$ so $27 + 45 = ..$

(d) $49 \overset{+1}{\to} 50 \overset{+34}{\to} ..$ so $49 + 35 = ..$

(e) $78 \overset{+2}{\to} 80 \overset{+12}{\to} ..$ so $78 + 14 = ..$

Exercise 326. *Complete the arrow way to add*

(a) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $38 + 18 = ..$

(b) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $59 + 15 = ..$

(c) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $17 + 26 = ..$

(d) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $38 + 24 = ..$

(e) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $27 + 25 = ..$

Exercise 327. *Rewrite the problem vertically to add*

(a) $38 + 25 = 63$

(b) $29 + 45 = ..$

$$\begin{array}{r} {\scriptstyle 1} \\ 38 \\ +\ 25 \\ \hline = 63 \end{array}$$

(c) $37 + 16 = ..$

(d) $26 + 35 = ..$

(e) $44 + 48 = ..$

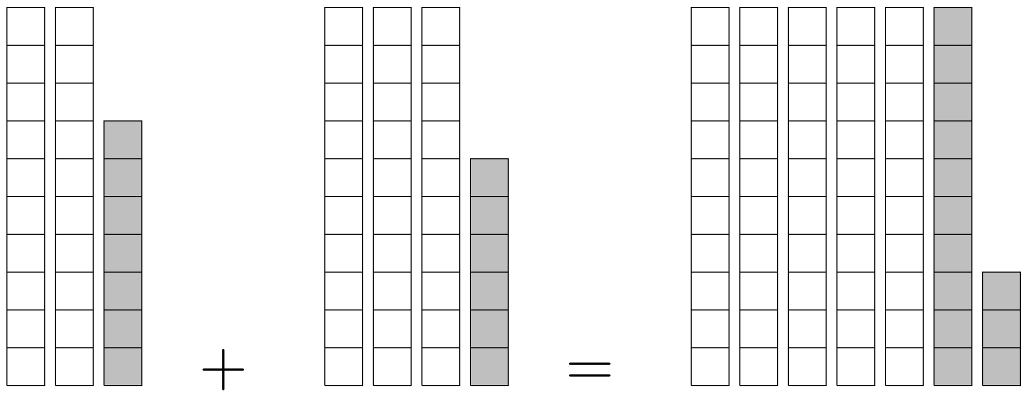
(f) $28 + 28 = ..$

(g) $35 + 36 = ..$

(h) $57 + 28 = ..$

.

Exercise 328. *Complete*



$27 \xrightarrow{+.} .. \xrightarrow{+..} ..$ $27 + 36 = ..$

2 tens 7 ones + 3 ten 6 ones = .. tens .. ones.

27+36=
. ⁄\ ..

$$\begin{array}{r} 27 \\ +\ 36 \\ \hline =\ .. \end{array}$$

Exercise 329. *Complete and circle the easiest method for you to calculate 58 + 13*

$$\begin{array}{r} 58 \\ +\ 13 \\ \hline =\ .. \end{array}$$

58+13=
. ⁄\ ..

$58 \xrightarrow{+.} .. \xrightarrow{+..} ..$

5 tens 8 ones + 1 ten 3 ones = .. tens .. ones.

Exercise 330. *Complete and circle the easiest method for you to calculate 69 + 25*

$$\begin{array}{r} 69 \\ +\ 25 \\ \hline =\ .. \end{array}$$

69+25=
. ⁄\ ..

$69 \xrightarrow{+.} .. \xrightarrow{+..} ..$

6 tens 9 ones + 2 ten 5 ones = .. tens .. ones.

Exercise 331. *Add*

$$\begin{array}{r} 15 \\ +\,13 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 43 \\ +\,32 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 26 \\ +\,73 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 45 \\ +\,45 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 43 \\ +\,17 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 26 \\ +\,24 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 19 \\ +\,16 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 35 \\ +\,35 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 26 \\ +\,26 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 47 \\ +\,13 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 58 \\ +\,26 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 59 \\ +\,22 \\ \hline = \ .. \end{array}$$

Exercise 332. *Complete*

(a) $25 \overset{+40}{\rightarrow} .. \overset{-1}{\rightarrow} .. \overset{+6}{\rightarrow} ..$

(b) $29 \overset{+1}{\rightarrow} .. \overset{-10}{\rightarrow} .. \overset{+20}{\rightarrow} ..$

(c) $58 \overset{+2}{\rightarrow} .. \overset{-10}{\rightarrow} .. \overset{+20}{\rightarrow} ..$

(d) $45 \overset{-5}{\rightarrow} .. \overset{-10}{\rightarrow} .. \overset{-10}{\rightarrow} ..$

Exercise 333. *Add*

$$\begin{array}{r} 25 \\ +\,25 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 40 \\ +\,10 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 47 \\ +\ 3 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 17 \\ +\,33 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 22 \\ +\,28 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 20 \\ +\,30 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 35 \\ +\,15 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 29 \\ +\,21 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 26 \\ +\,24 \\ \hline = \ .. \end{array}$$

Exercise 334. *Complete the arrow way to add*

(a) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $29 + 21 = ..$

(b) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $57 + 43 = ..$

(c) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $68 + 22 = ..$

(d) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $45 + 25 = ..$

(e) $.. \overset{+.}{\rightarrow} .. \overset{+..}{\rightarrow} ..$ so $56 + 24 = ..$

Exercise 335. *Calculate*

$17+23=\cdots$ $28+12=\cdots$

$25+65=\cdots$ $39+31=\cdots$

$58+22=\cdots$ $25+25=\cdots$

$39+21=\cdots$ $35+35=\cdots$

Exercise 336. *Calculate*

$59+23=\cdots$ $27+34=\cdots$

$28+43=\cdots$ $46+45=\cdots$

$27+27=\cdots$ $48+48=\cdots$

$49+42=\cdots$ $19+19=\cdots$

$77+\ 7\ =\cdots$ $89+\ 9\ =\cdots$

Exercise 337. *Add*

$$\begin{array}{r} 22 \\ +\,25 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 46 \\ +\,10 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 43 \\ +\,13 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 57 \\ +\,36 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 48 \\ +\,28 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 56 \\ +\,26 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 38 \\ +\,37 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 29 \\ +\,57 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 57 \\ +\,18 \\ \hline = \ .. \end{array}$$

Exercise 338. *Complete the arrow way to add*

(a) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $29 + 23 = ..$

(b) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $57 + 14 = ..$

(c) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $68 + 25 = ..$

(d) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $48 + 27 = ..$

(e) $.. \overset{+.}{\to} .. \overset{+..}{\to} ..$ so $26 + 16 = ..$

Exercise 339.

Sam confused about this problem :

$$16 + 14 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

Exercise 340.

Jhon confused about this problem :

$$28 + 52 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

Exercise 341.

Sam confused about this problem :

$$28 + 17 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

Exercise 342.

Jane confused about this problem :

$$36 + 15 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

Exercise 343.

Victor confused about this problem :

$$17 + 25 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

Exercise 344.

Kate confused about this problem :

$$19 + 52 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

4.6 Substraction

Exercise 345. *Calculate*

$$\begin{array}{r} 10 \\ -\ 4 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 10 \\ -\ 9 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 10 \\ -\ 5 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 10 \\ -\ 2 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 10 \\ -\ 7 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 10 \\ -\ 6 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 10 \\ -\ 1 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 10 \\ -\ 8 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 10 \\ -\ 3 \\ \hline = \ .. \end{array}$$

Exercise 346. *Calculate*

$$\begin{array}{r} 14 \\ -\ 4 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 19 \\ -\ 10 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 16 \\ -\ 5 \\ \hline = \ .. \end{array}$$

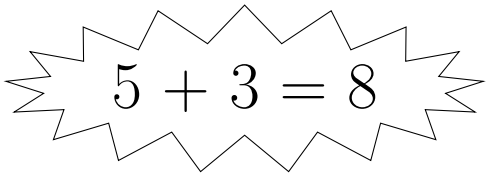
$$\begin{array}{r} 40 \\ -\ 10 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 55 \\ -\ 5 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 36 \\ -\ 23 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 76 \\ -\ 42 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 85 \\ -\ 55 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 99 \\ -\ 88 \\ \hline = \ .. \end{array}$$

Exercise 347. *Complete*

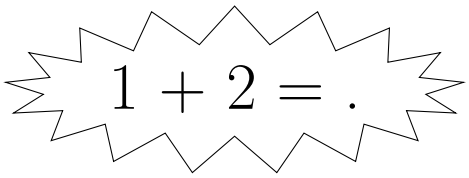
$15 - 7 = 8$

$5 \quad 10$



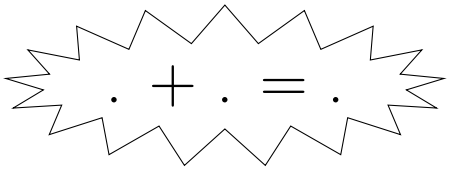
$11 - 8 = \cdot$

$1 \quad 10$



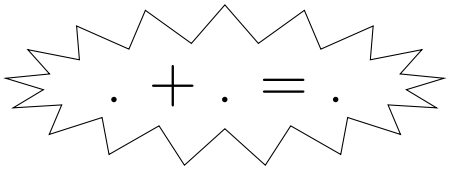
$14 - 5 = \cdot$

$4 \quad 10$



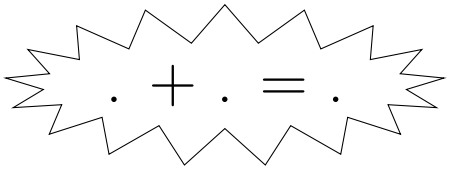
$13 - 7 = \cdot$

$. \quad .$



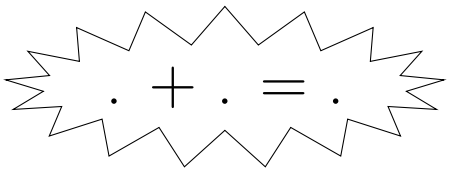
$14 - 7 = \cdot$

$. \quad .$



$13 - 6 = \cdot$

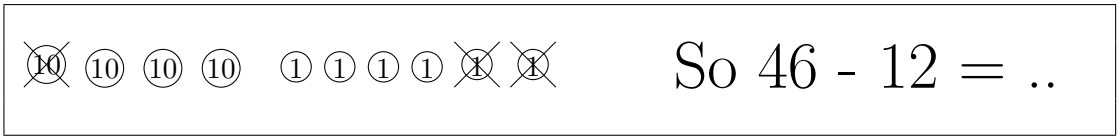
$. \quad .$

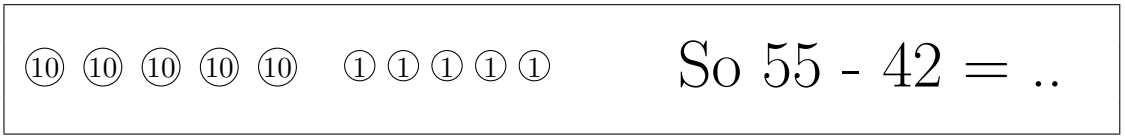


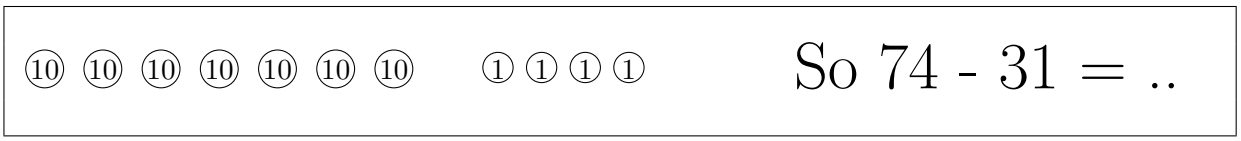
Exercise 348. *Calculate.*

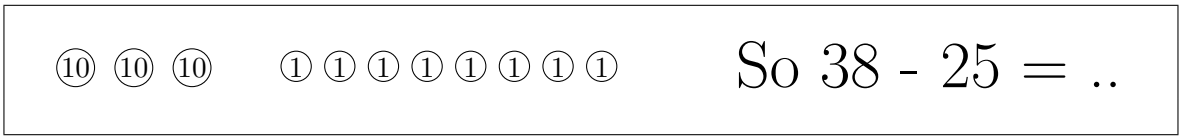
15 - 8 = ..	13 - 6 = ..	16 - 8 = ..
14 - 7 = ..	12 - 6 = ..	18 - 9 = ..
19 - 8 = ..	16 - 9 = ..	16 - 9 = ..
12- 4 = ..	14 - 8 = ..	13 - 5 = ..
20 - 19 = ..	16 - 6 = ..	12 - 2 = ..
10 - 8 = ..	14 - 5 = ..	15 - 7 = ..
12 - 3 = ..	17 - 9 = ..	16 - 7 = ..
19 - 0 = ..	19 - 18 = ..	11 - 5 = ..
15 - 5 = ..	11 - 9 = ..	20 - 10 = ..
17 - 11 = ..	18 - 8 = ..	12 - 8 = ..
18 - 5 = ..	12 - 3 = ..	16 - 7 = ..

Exercise 349. *Cross off to find the difference.*



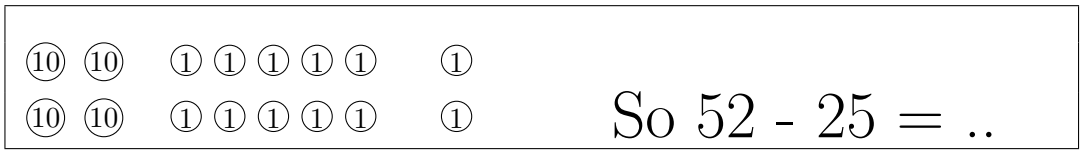


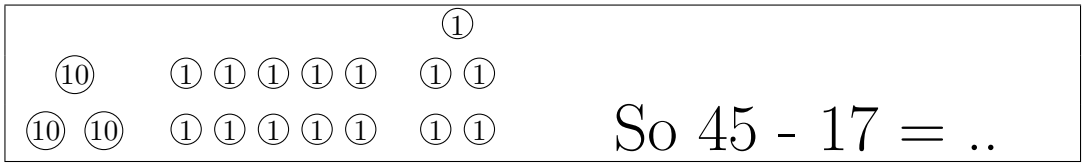


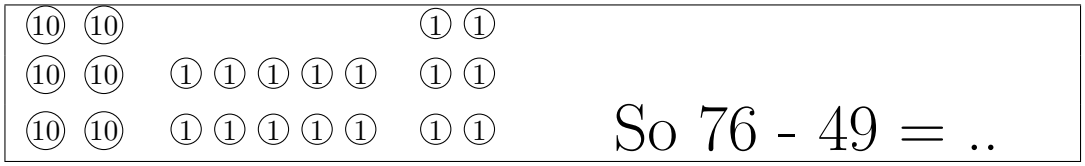


Exercise 350. *Draw tens and ones, then cross off to find the difference.*

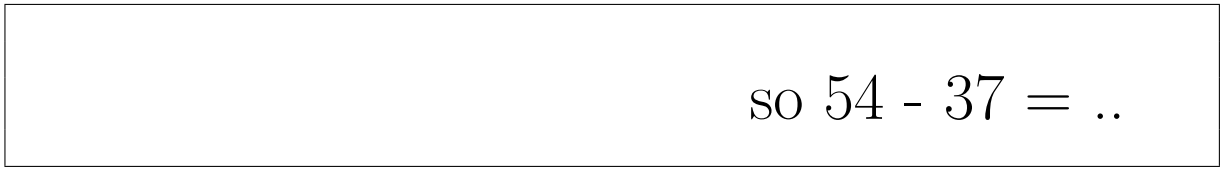
Exercise 351. *Cross off to find the difference.*



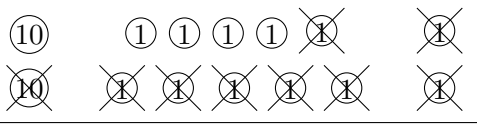




Exercise 352. *Draw tens and ones, then cross off to find the difference.*



$$32 - 18 = ?$$



So 32 - 18 = 14

32 is the same as 3 tens and 2 ones

32 is the same as 2 tens and 12 ones

3 tens is the same as 2 tens and 10 ones

Vertical substraction

$$\begin{array}{r} {\scriptstyle 1} \\ 2\ \not{3}2 \\ -\ 18 \\ \hline = 14 \end{array}$$

The arrow way

$$32 \overset{-10}{\rightarrow} 22 \overset{-2}{\rightarrow} 20 \overset{-6}{\rightarrow} 14$$

The substraction sentence 32 - 18 = 14

The addition sentence : 18 + 14 = 32

Exercise 353. *Complete the arrow way to find the difference*

$54 \overset{-20}{\rightarrow} .. \overset{-4}{\rightarrow} .. \overset{-2}{\rightarrow} ..$ so $54 - 26 = ..$

$72 \overset{-40}{\rightarrow} .. \overset{-2}{\rightarrow} .. \overset{-5}{\rightarrow} ..$ so $72 - 47 = ..$

$95 \overset{-50}{\rightarrow} .. \overset{-5}{\rightarrow} .. \overset{-3}{\rightarrow} ..$ so $95 - 58 = ..$

$56 \overset{-30}{\rightarrow} .. \overset{-6}{\rightarrow} .. \overset{-1}{\rightarrow} ..$ so $56 - 37 = ..$

$45 \overset{-10}{\rightarrow} .. \overset{-5}{\rightarrow} .. \overset{-4}{\rightarrow} ..$ so $45 - 19 = ..$

Exercise 354. *Complete the arrow way to find the difference*

$.. \overset{\cdots}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} ..$ so $62 - 36 = ..$

$.. \overset{\cdots}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} ..$ so $85 - 47 = ..$

$.. \overset{\cdots}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} ..$ so $42 - 25 = ..$

$.. \overset{\cdots}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} ..$ so $34 - 18 = ..$

$.. \overset{\cdots}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} .. \overset{\cdot\cdot}{\rightarrow} ..$ so $73 - 58 = ..$

Exercise 355. *Calculate*

$$\begin{array}{r} 41 \\ -\ 29 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 65 \\ -\ 37 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 36 \\ -\ 18 \\ \hline = \ .. \end{array}$$

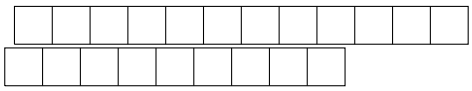
$$\begin{array}{r} 25 \\ -\ 16 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 62 \\ -\ 18 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 96 \\ -\ 69 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 51 \\ -\ 25 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 72 \\ -\ 36 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 94 \\ -\ 47 \\ \hline = \ .. \end{array}$$

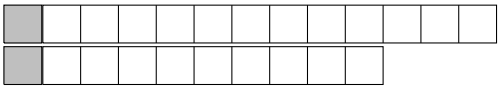
$$\begin{array}{r} 44 \\ -\ 18 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 56 \\ -\ 38 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 73 \\ -\ 29 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 99 \\ -\ 73 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 92 \\ -\ 53 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 85 \\ -\ 37 \\ \hline = \ .. \end{array}$$

$$\begin{array}{r} 61 \\ -\ 39 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 72 \\ -\ 39 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 88 \\ -\ 59 \\ \hline = \ .. \end{array}$$



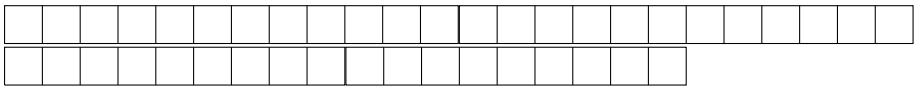
$$12 - 9 = 3$$



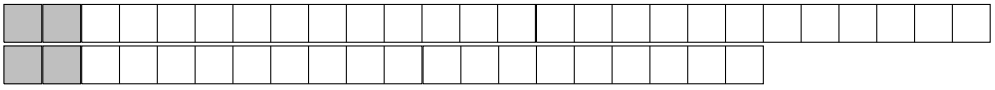
$$13 - 10 = 3$$

$$\text{So } 12 - 9 = 13 - 10 = 3$$

Exercise 356. *Complete*

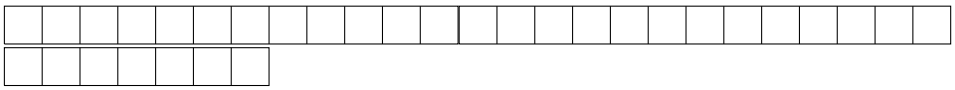


$$24 - 18 = ..$$

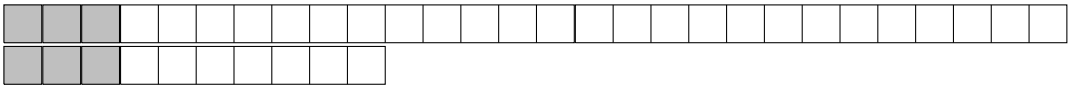


$$26 - 20 = ..$$

$$\text{So } .. - .. = .. - .. = ..$$



$$25 - 7 = ..$$



$$28 - 10 = ..$$

$$\text{So } .. - .. = .. - .. = ..$$

Exercise 357. *Match*

52 - 17 •	• 54 - 20
53 - 19 •	• 55 - 20
92 - 56 •	• 93 - 30
91 - 28 •	• 96 - 60

Exercise 358. *Find the difference (subtract 10, 20, 30, ...).*

31 - 18 = .. - 20 = ..

53 - 29 = .. - 30 = ..

83 - 47 = .. - 50 = ..

92 - 66 = .. - 70 = ..

61 - 25 = .. - 30 = ..

Exercise 359. *Find the difference (subtract 10, 20, 30, ...).*

42 - 19 = .. - .. = ..

74 - 38 = .. - .. = ..

51 - 25 = .. - .. = ..

95 - 67 = .. - .. = ..

41 - 26 = .. - .. = ..

Exercise 360.

Kate confused about this problem :

$$41 - 18 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

(c) Make the number bond.

(d) Write the adition sentence to match the problem.

(e) Subtract 30 to solve the problem.

Exercise 361.

Jane confused about this problem :

$$34 - 17 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

(c) Make the number bond.

(d) Write the adition sentence to match the problem.

(e) Subtract tens to solve the problem.

Exercise 362.

Kate confused about this problem :

$$65 - 37 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

(c) Make the number bond.

(d) Write the adition sentence to match the problem.

(e) Subtract tens to solve the problem.

Exercise 363.

Kate confused about this problem :

$$52 - 19 =$$

(a) Draw tens and ones to solve the problem. Make the vertical addition.

(b) Solve the problem with the arrow way.

(c) Make the number bond.

(d) Write the adition sentence to match the problem.

(e) Subtract tens to solve the problem.

Exercise 364.

There are 23 birds on the tree.

Some more birds join them.
Now there are 51 birds on the tree.

(a) How many birds join them?

Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond to shows the story.

(c) Write the addition sentence and a substruction sentence to match the story.

....

Exercise 365.

There are 15 students in the classroom.

Some more students join them.
Now there are 31 students in the classroom.

(a) How many students join them?

Explain your thinking using a math drawing, numbers and words.

(b) Make a number bond to shows the story.

(c) Write the addition sentence and a substruction sentence to match the story.

....

4.7 Coding

Alphabet code

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

Exercise 366. *Use the alphabet code to solve what it says.*

13	1	20	8

Exercise 367. *Use the alphabet code to solve what it says.*

14	9	3	5

Exercise 368. *Use the alphabet code to solve what it says.*

7	15	15	4

Exercise 369. *Use the alphabet code to solve what it says.*

6	12	21	5	14	3	25

Exercise 370. *Use the alphabet code to solve what it says.*

14	21	13	2	5	18	19

Alphabet code

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

Exercise 371. *Use the alphabet code to solve what it says.*

9		12	15	22	5		13	1	20	8	

Exercise 372. *Use the alphabet code to solve what it says.*

6	18	5	5		1	19		1		2	9	18	4		

Exercise 373. *Use the alphabet code to solve what it says.*

2	15	15	11		9	19		13	25		2	5	19	20					

6	18	9	5	14	4						

Exercise 374. *Use the alphabet code to solve what it says.*

23	15	18	11		8	1	18	4							

4	18	5	1	13		2	9	7							

Alphabet code

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

Exercise 375. *Use the key to find the code then use alphabet code to solve what it says.*

Given numbers	→	Key	→	Code	→	Message
29		- 21				
30						

$$\begin{array}{r} 29 \\ -\ 21 \\ \hline = \ .. \end{array} \qquad \begin{array}{r} 30 \\ -\ 21 \\ \hline = \ .. \end{array}$$

Exercise 376. *Use the key to find the code then use alphabet code to solve what it says.*

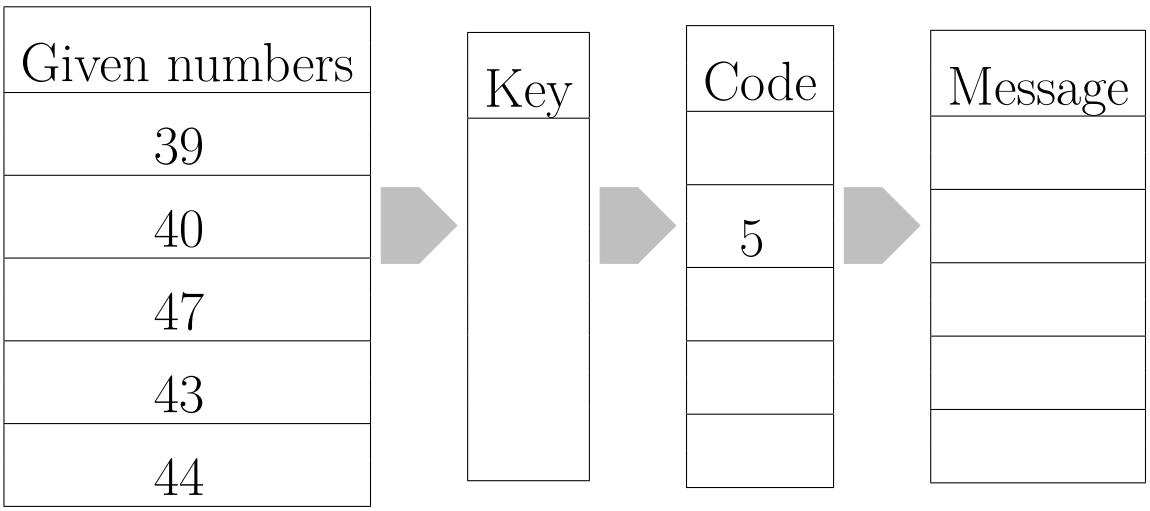
Given numbers	→	Key	→	Code	→	Message
27		- 25				
50						

Alphabet code

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

Exercise 377. *Find the key to find the code then use alphabet code to solve what it says.*

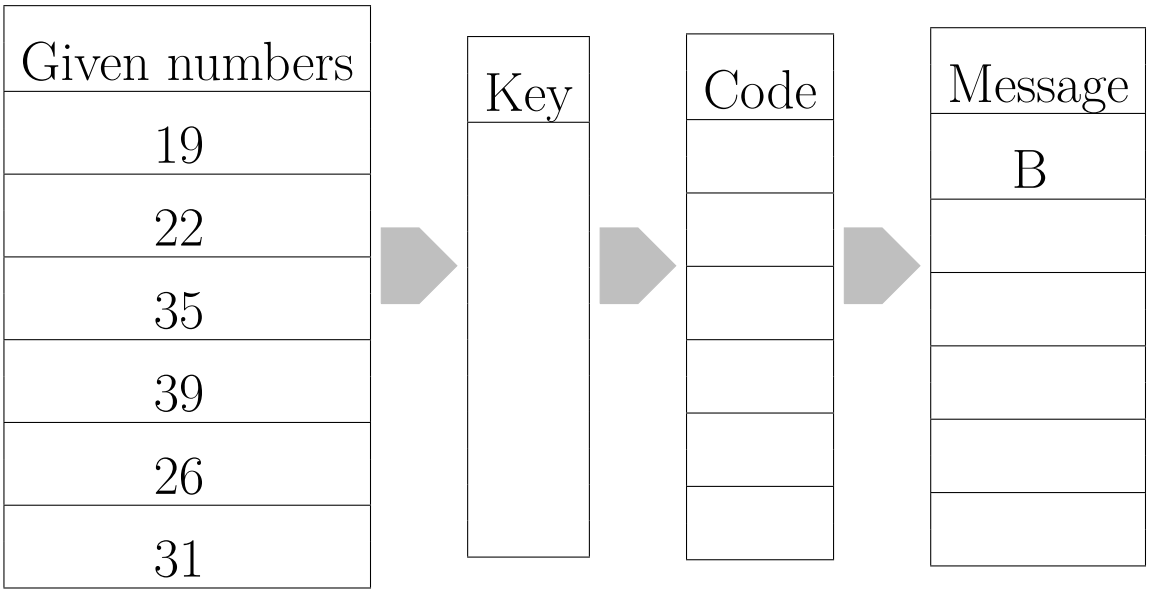


Alphabet code

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

Exercise 378. *Find the key to find the code then use alphabet code to solve what it says.*



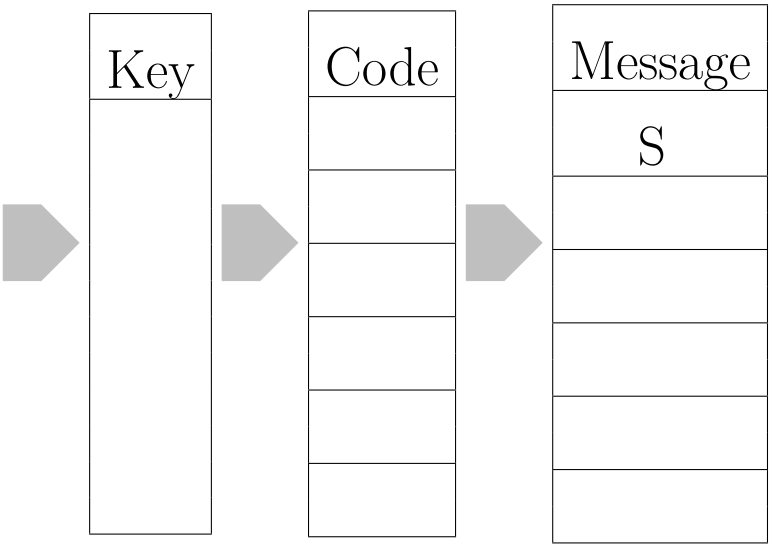
Alphabet code

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

Exercise 379. *Find the key to find the code then use alphabet code to solve what it says.*

Given numbers
45
51
30
40
31
51



Alphabet code

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

Exercise 380. *Finde the code then find the given numbers.*

Given numbers		Key		Code		Message
	→	- 16	→		→	W
						A
						S
						H
						I
						N
						T
						H
						O
						N

Exercise 381. *Use the key to find the missing number.*

The key

+ 1	- 1	+ 10	- 10
→	←	↑	↓

(a)

10	→	→	→	→	→	

(b)

10	←	←	←	←	←	

(c)

10	↑	↑	↑	↑	↑	

(d)

100	↓	↓	↓	↓	↓	

Exercise 382. *Use the key to find the missing number.*

The key

+ 2	- 2	+ 20	- 20
→	←	↑	↓

(a)

10	→	→	→	→	→	

(b)

10	←	←	←	←	←	

(c)

10	↑	↑	↑	↑	↑	

(d)

100	↓	↓	↓	↓	↓	

Exercise 383. *Use the key to find the missing number.*

The key

+ 1	- 1	+ 10	- 10
→	←	↑	↓

(a)

10	↑	→	↑	→	↑	

(b)

10	→	↑	→	↑	→	

(c)

100	↓	←	↓	←	↓	

(d)

100	←	↓	←	↓	←	

Exercise 384. *Use the key to find the missing number.*

The key

+ 2	- 2	+ 20	- 20
→	←	↑	↓

(a)

10	↑	→	↑	→	↑	

(b)

10	→	↑	→	↑	→	

(c)

100	↓	←	↓	←	↓	

(d)

100	←	↓	←	↓	←	

Exercise 385. *Use the key to find the missing number.*

The key

+ 1	- 1	+ 10	- 10
→	←	↑	↓

(a)

10	→	←	→	←	

(b)

10	←	→	←	→	

(c)

100	↓	↑	↓	↑	

(d)

0	↑	↓	↑	↓	

Exercise 386. *Use the key to find the missing number.*

The key

+ 2	- 2	+ 20	- 20
→	←	↑	↓

(a)

10	→	←	→	←	

(b)

10	←	→	←	→	

(c)

100	↓	↑	↓	↑	

(d)

0	↑	↓	↑	↓	

Exercise 387. *Use the key to write the missing arraows.*

The key

+ 1	- 1	+ 10	- 10
$\rightarrow$	$\leftarrow$	$\uparrow$	$\downarrow$

(a)

10					14

(b)

10					50

(c)

10					6

(d)

100					60

Exercise 388. *Use the key to write the missing arraows.*

The key

+ 2	- 2	+ 20	- 20
$\rightarrow$	$\leftarrow$	$\uparrow$	$\downarrow$

(a)

10					18

(b)

10					90

(c)

10					2

(d)

100					20

Exercise 389. *Use the key to write the missing arraows.*

The key

+ 1	- 1	+ 10	- 10
→	←	↑	↓

(a)

0					0

(b)

0					17

(c)

0					29

(d)

100					78

Exercise 390. *Use the key to write the missing arraows.*

The key

+ 2	- 2	+ 20	- 20
→	←	↑	↓

(a)

0					44

(b)

0					16

(c)

100					42

(d)

100					74