Let's Do MATHEMATICS

Worktext 2A

for learners ***7 - 8 years old***

Let's Do Mathematics

Let's Do Mathematics is a series covering levels K-6 and is fully aligned to the United States Common Core State Standards (USCCSS). Each level consists of two books (Book A and Book B) and combines textbook-style presentation of concepts as well as workbook practice.

Central to the USCCSS is the promotion of problem-solving skills and reasoning. Let's Do Mathematics achieves this by teaching and presenting concepts through a problem-solving based pedagogy and using the concrete-pictorial-abstract (CPA) approach. Learners acquire knowledge and understanding of concepts through a guided progression beginning with concrete examples and experiences which then flow into pictorial representations and finally mastery at the abstract and symbolic level. This approach ensures that learners develop a fundamental understanding of concepts rather than answering questions by learned procedures and algorithms.

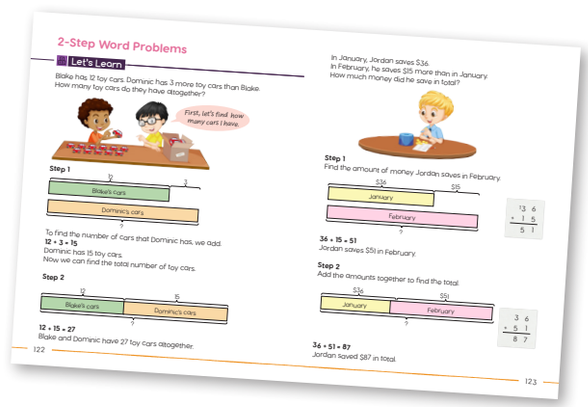
Key features of the series include:

Anchor Task

Open-ended activities serve as the starting point for understanding new concepts. Learners engage in activities and discussions to form concrete experiences before the concept is formalized.

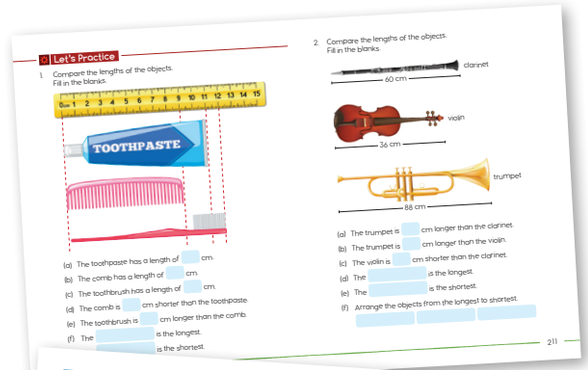
Let's Learn

Concepts are presented in a clear and colorful manner. Worked problems provide learners with guided step-by-step progression through examples. Series mascots provide guidance through helpful comments and observations when new concepts are introduced.



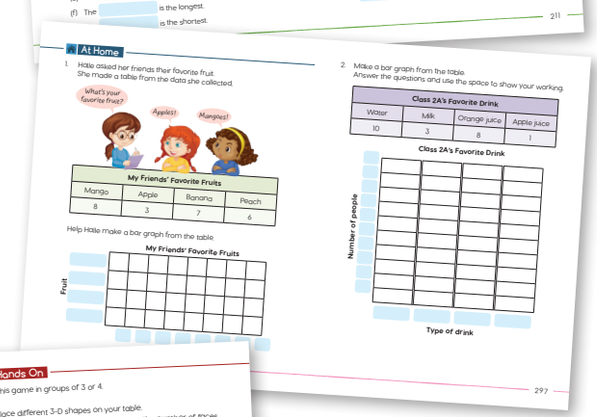
Let's Practice

Learners demonstrate their understanding of concepts through a range of exercises and problems to be completed in a classroom environment. Questions provide a varying degree of guidance and scaffolding as learners progress to mastery of the concepts.



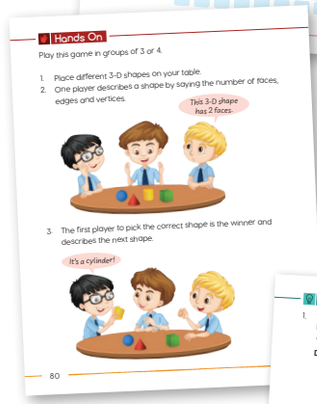
At Home

Further practice designed to be completed without the guidance of a teacher. Exercises and problems in this section follow on from those completed under Let's Practice.



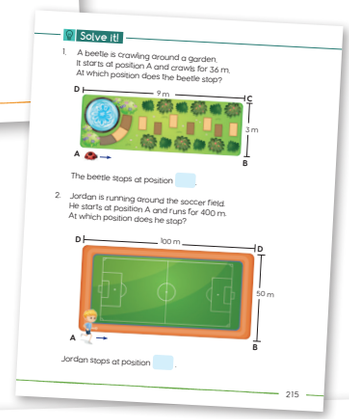
Hands On

Learners are encouraged to 'learn by doing' through the use of group activities and the use of mathematical manipulatives.



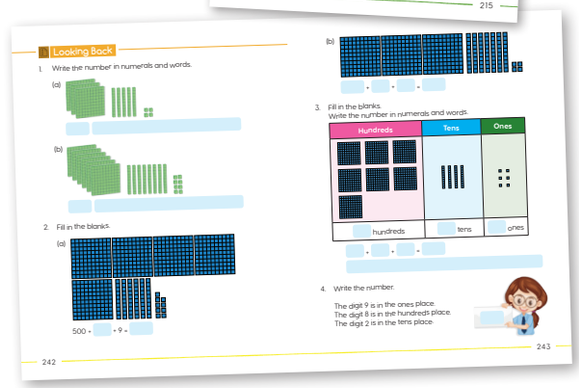
Solve It!

Activities that require learners to apply logical reasoning and problem-solving. Problems are often posed which do not have a routine strategy for solving them. Learners are encouraged to think creatively and apply a range of problem-solving heuristics.



Looking Back

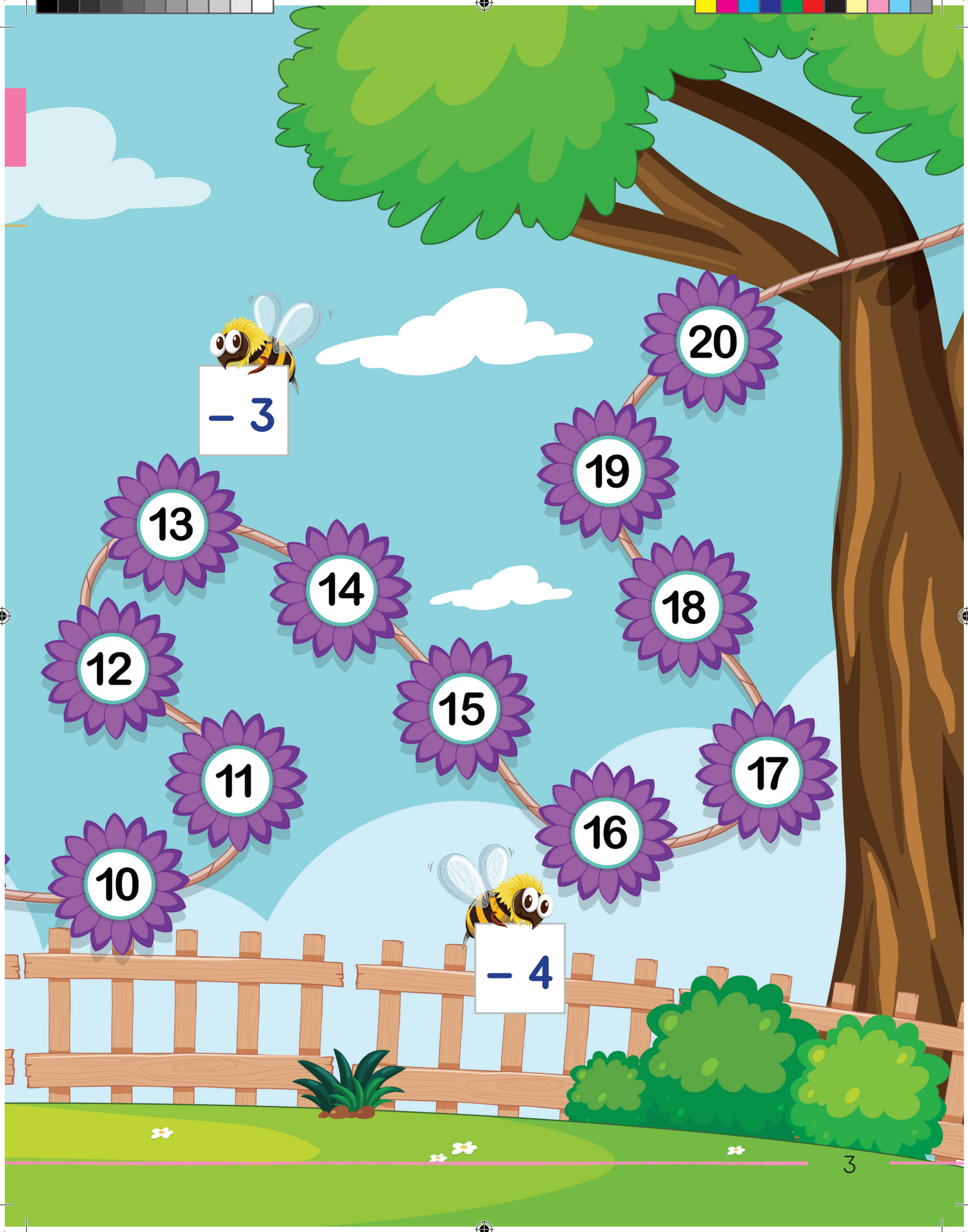
Consolidated practice where learners demonstrate their understanding on a range of concepts taught within a unit.



Contents

1 Addition and Subtraction to 20

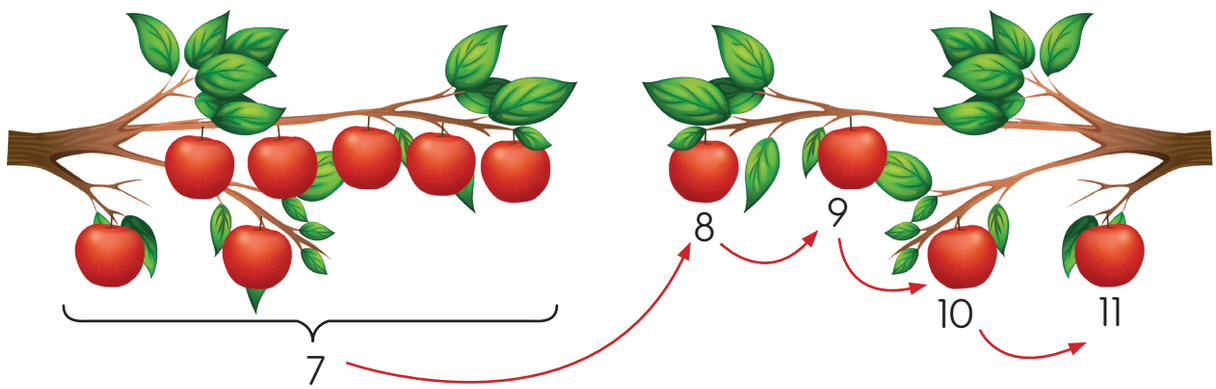
Anchor Task


– 3
20
19
13
14
18
12
15
11
17
16
10
– 4

Adding by Counting On

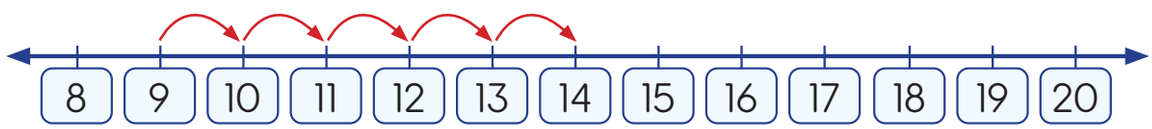
Let's Learn

How many apples are there in all?
Let's count on.



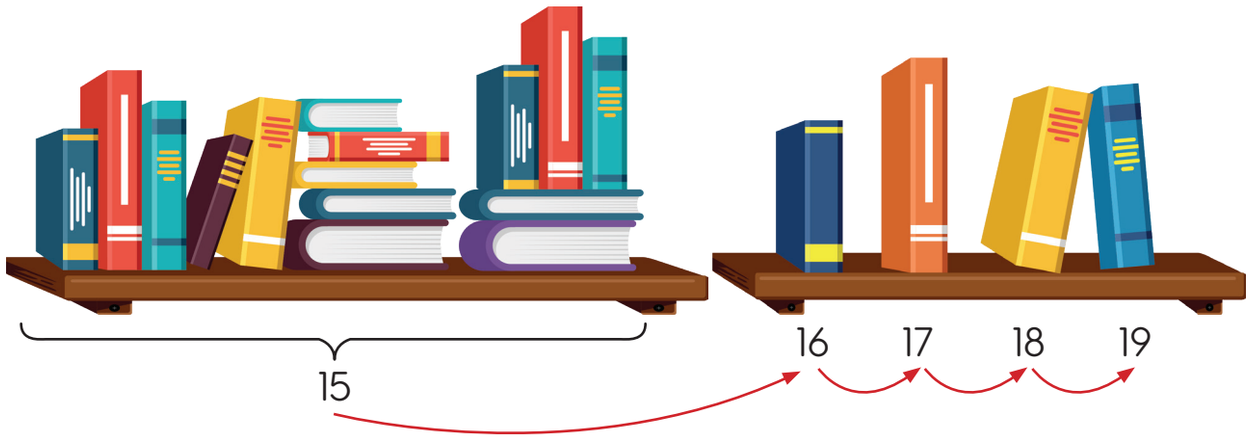
7 + 4 = 11
There are 11 apples in all.

Find 9 + 5.
Count on the number line to add.



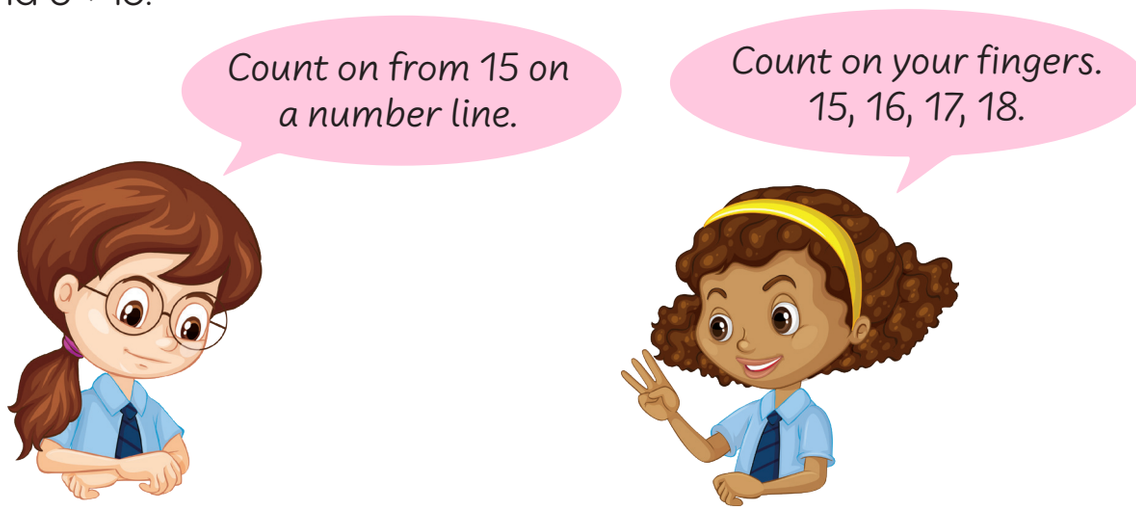
9 + 5 = 14

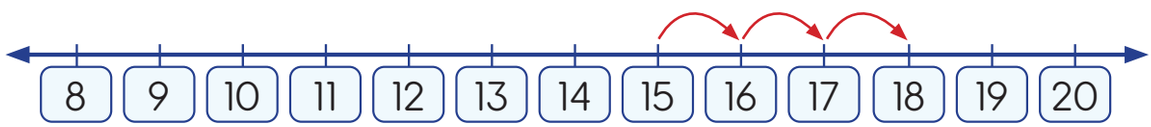
How many books are there in all?
Count on to find 15 + 4.



15 + 4 = 19
There are 19 books in all.

Find 3 + 15.



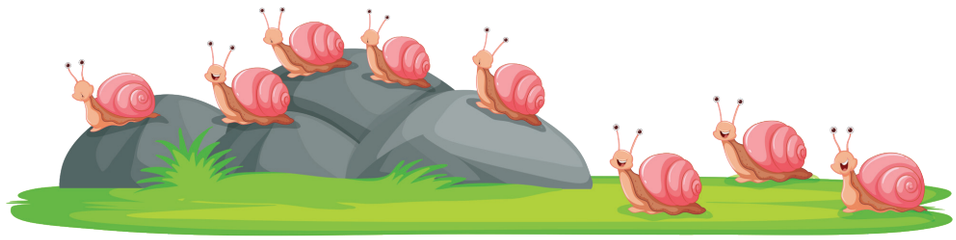


3 + 15 = 18

Let's Practice

1. Add by counting on.
Write an addition equation.

(a)



5 + 3 = 8

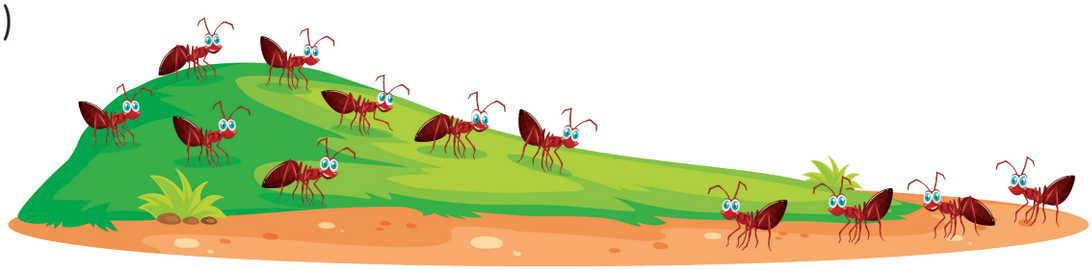
(b)

___ + ___ = ___

(c)

___ + ___ = ___

(d)



___ + ___ = ___

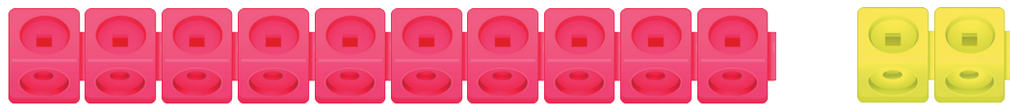
2. Add by counting on.
Write an addition equation.

(a) 

___ + ___ = ___

(b) 

___ + ___ = ___

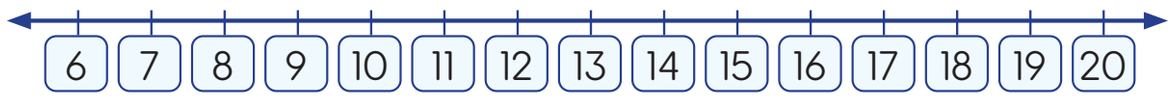
(c) 

___ + ___ = ___

(d) 

___ + ___ = ___

3. Use the number line to count on from the greater number.
Complete the equation.



(a) 6 + 5 = ___

(b) 3 + 8 = ___

(c) 5 + 8 = ___

(d) 5 + 9 = ___

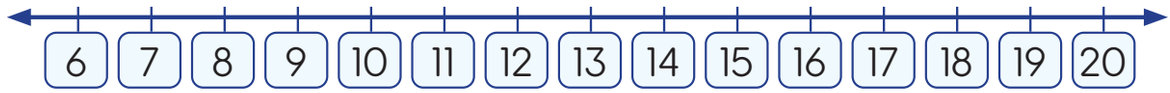
(e) 4 + 9 = ___

(f) 5 + 7 = ___

(g) 7 + 3 = ___

(h) 9 + 2 = ___

4. Use the number line to count on from the greater number. Complete the equation.



(a) 5 + 11 = ____

(b) 10 + 5 = ____

(c) 12 + 2 = ____

(d) 11 + 3 = ____

(e) 14 + 4 = ____

(f) 15 + 4 = ____

(g) 18 + 2 = ____

(h) 17 + 3 = ____

(i) 4 + 15 = ____

(j) 12 + 4 = ____

5. Add.

(a)
$$\begin{array}{r} 15 \\ +\ 3 \\ \hline \end{array}$$

(b)
$$\begin{array}{r} 11 \\ +\ 1 \\ \hline \end{array}$$

(c)
$$\begin{array}{r} 12 \\ +\ 5 \\ \hline \end{array}$$

(d)
$$\begin{array}{r} 14 \\ +\ 2 \\ \hline \end{array}$$

(e)
$$\begin{array}{r} 18 \\ +\ 1 \\ \hline \end{array}$$

(f)
$$\begin{array}{r} 13 \\ +\ 2 \\ \hline \end{array}$$

(g)
$$\begin{array}{r} 14 \\ +\ 5 \\ \hline \end{array}$$

(h)
$$\begin{array}{r} 11 \\ +\ 5 \\ \hline \end{array}$$

(i)
$$\begin{array}{r} 15 \\ +\ 2 \\ \hline \end{array}$$

Solve It!

Which country is Steve from?

Add. Then write the letters in the spaces below.

(a) 2 + 9 = ____ U

(b) 8 + 4 = ____ A

(c) 15 + 2 = ____ A

(d) 9 + 5 = ____ L

(e) 8 + 5 = ____ R

(f) 12 + 4 = ____ T

(g) 16 + 3 = ____ I

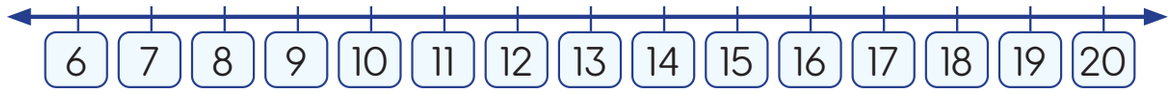
(h) 15 + 5 = ____ S

(i) 1 + 14 = ____ A

15	11	20	16	13	12	14	19	17

At Home

1. Use the number line to count on from the greater number. Complete the equation.



(a) 5 + 7 = ____ (b) 5 + 9 = ____

(c) 15 + 3 = ____ (d) 13 + 6 = ____

(e) 2 + 13 = ____ (f) 15 + 2 = ____

(g) 8 + 5 = ____ (h) 14 + 3 = ____

(i) 16 + 4 = ____ (j) 4 + 7 = ____

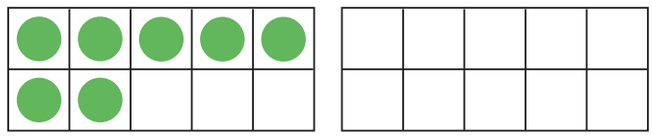
2. Add.

(a) 11 + 3 = ____ (b) 15 + 4 = ____ (c) 12 + 3 = ____

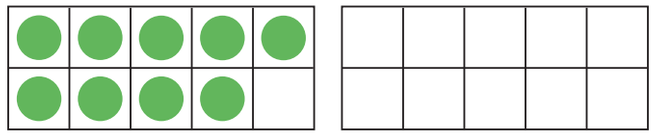
(d) 17 + 1 = ____ (e) 10 + 6 = ____ (f) 12 + 2 = ____

(g) 12 + 1 = ____ (h) 13 + 5 = ____ (i) 16 + 3 = ____

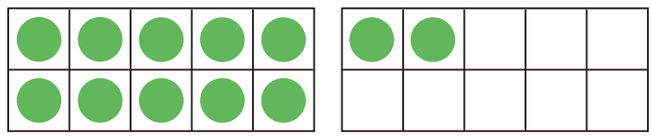
3. Color the ten frames to find the missing addend. Complete the equation.

(a) 

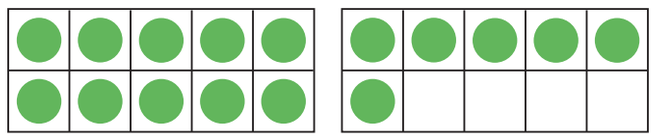
7 + ____ = 11

(b) 

9 + ____ = 14

(c) 

12 + ____ = 17

(d) 

16 + ____ = 20

4. Complete the equations.

(a) 8 + ____ = 12

(b) 9 + ____ = 14

(c) ____ + 4 = 13

(d) 15 + ____ = 19

(e) 16 + ____ = 18

(f) ____ + 3 = 19

(g) ____ + 4 = 17

(h) 14 + ____ = 15

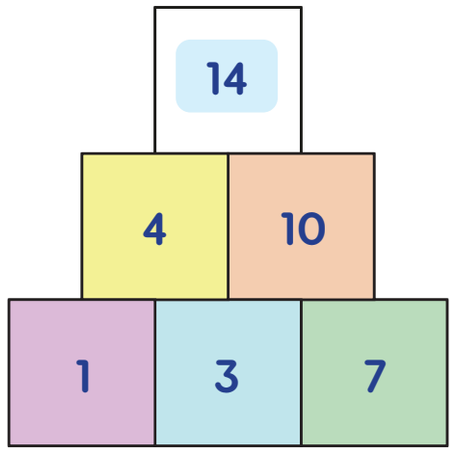
(i) ____ + 2 = 20

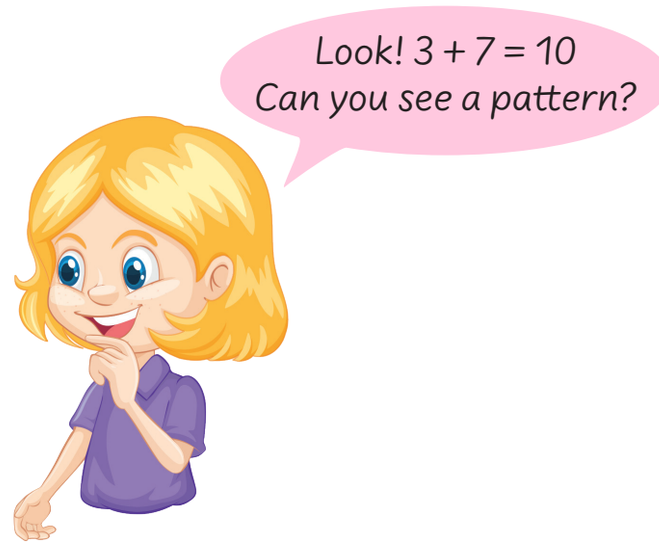
(j) ____ + 11 = 16

Solve It!

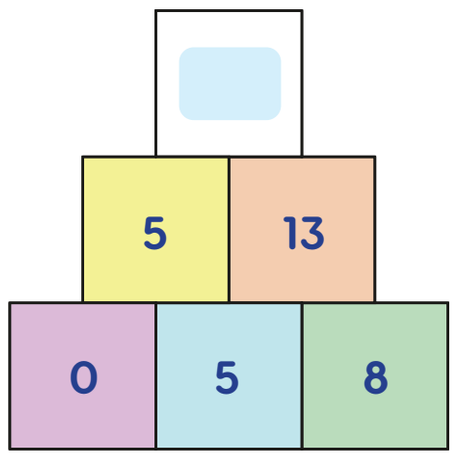
1. Fill in the missing numbers.

(a)

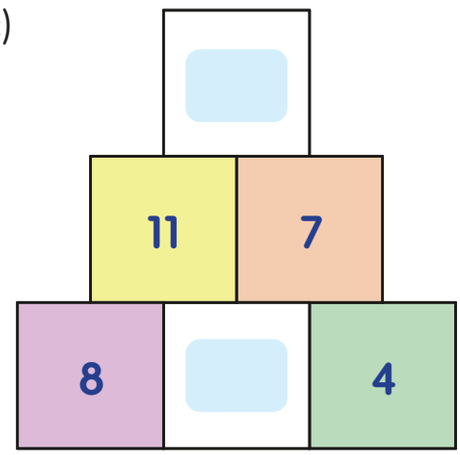




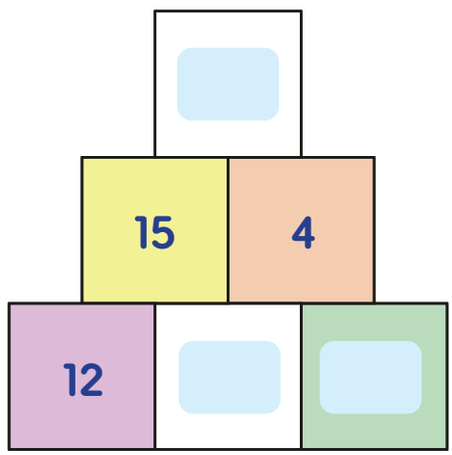
(b)



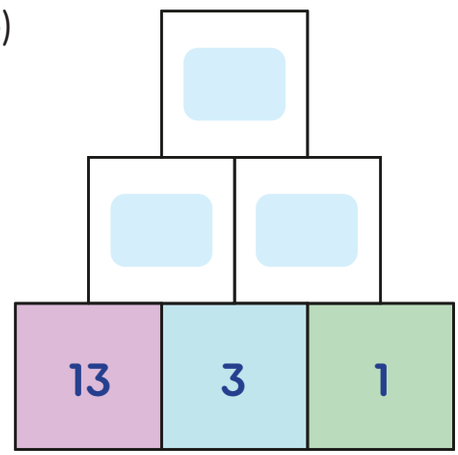
(c)



(d)

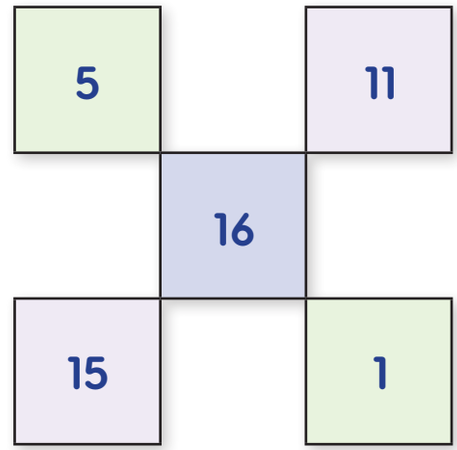


(e)

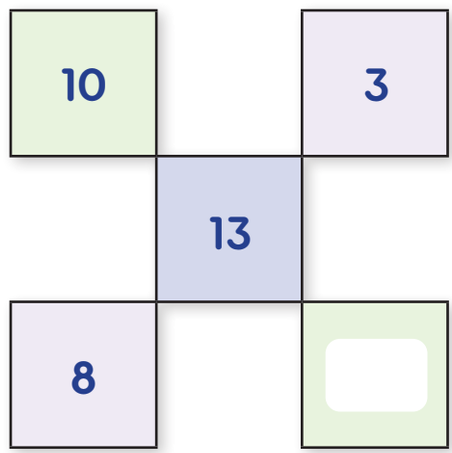


2. Fill in the missing numbers.

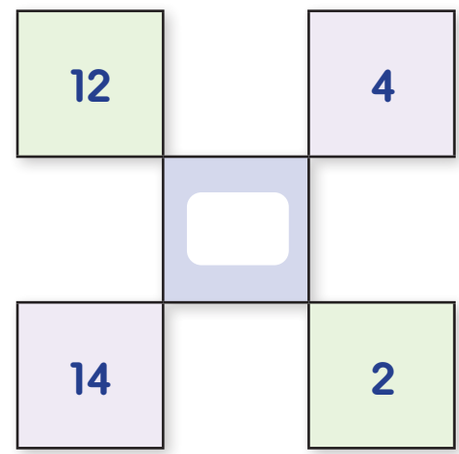
(a)



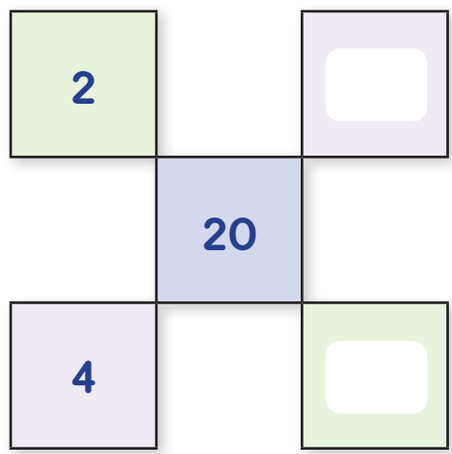
(b)



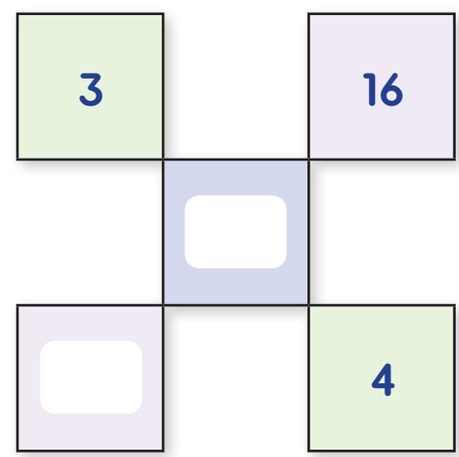
(c)



(d)



(e)

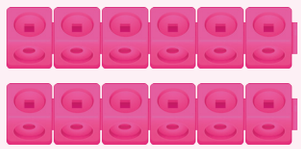


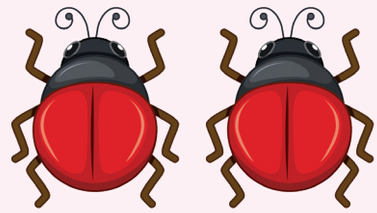
Adding Using Doubles and Near Doubles

Let's Learn

We can use doubles to add.
A double is when both numbers we are adding are the same.

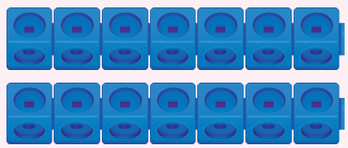
Double 6





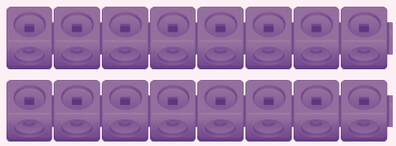
6 + 6 = 12

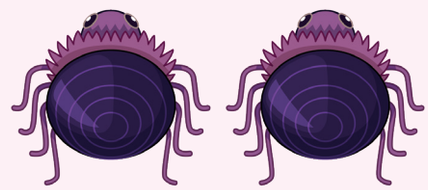
Double 7



7 + 7 = 14

Double 8



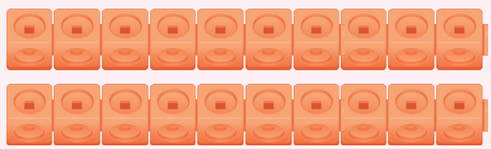


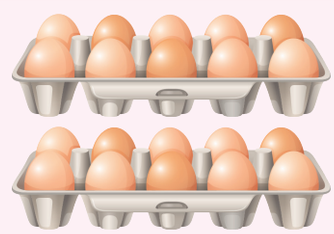
8 + 8 = 16

Double 9

9 + 9 = 18

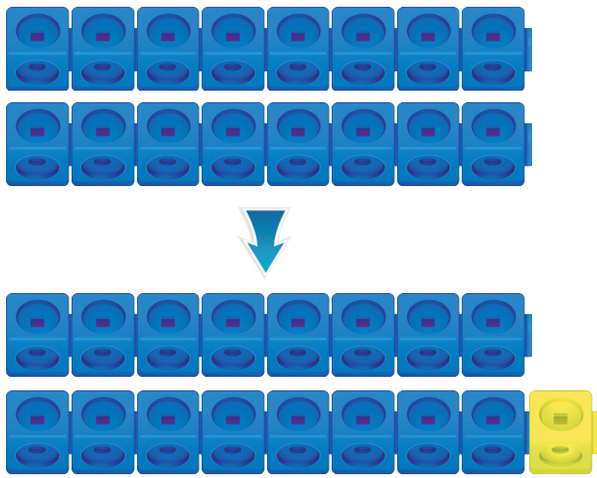
Double 10





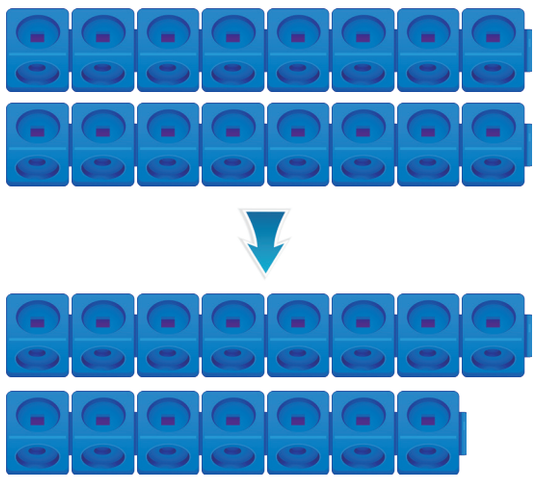
10 + 10 = 20

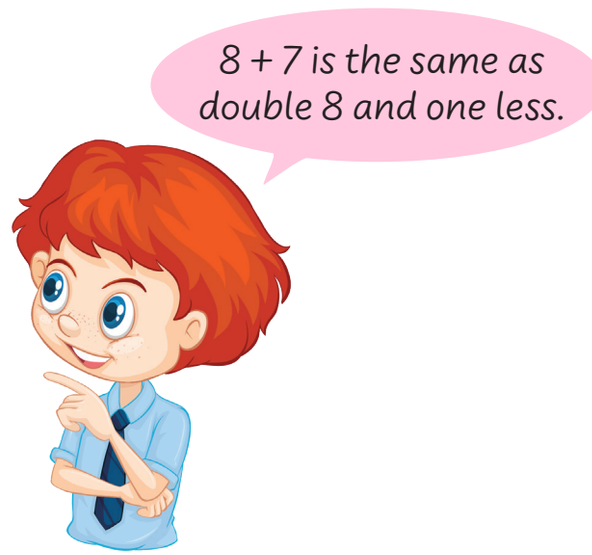
We can use near doubles to add.
Let's find 8 + 9.



8 + 9 = 16 + 1
= 17

Let's use near doubles to find 8 + 7.



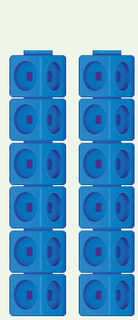


8 + 7 = 16 – 1
= 15

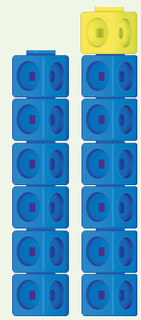
Let's Practice

1. Use doubles and near doubles to complete the equations.

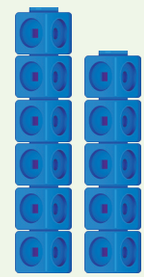
(a)



6 + 6 = ____

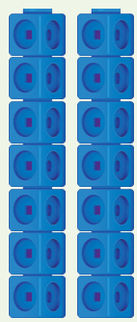


6 + 7 = ____

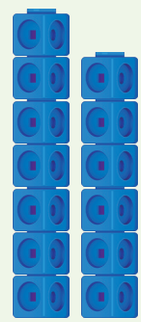


6 + 5 = ____

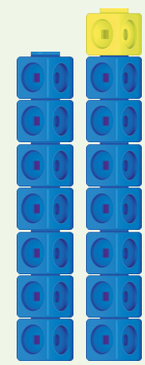
(b)



7 + 7 = ____

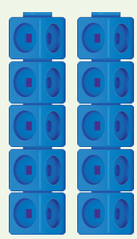


7 + 6 = ____

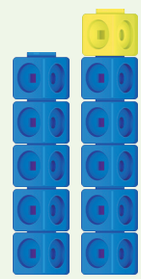


7 + 8 = ____

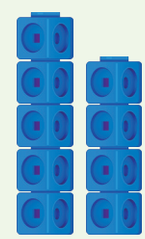
(c)



5 + 5 = ____

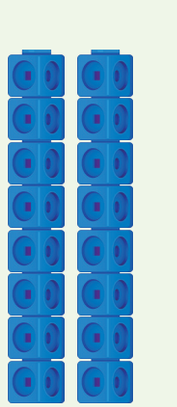


5 + 6 = ____

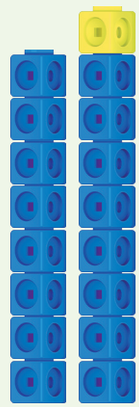


5 + 4 = ____

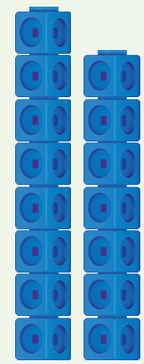
(d)



8 + 8 = ____

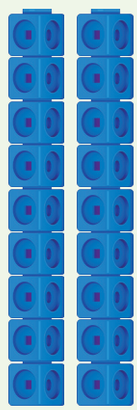


8 + 9 = ____

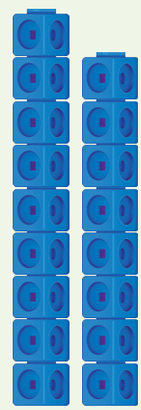


8 + 7 = ____

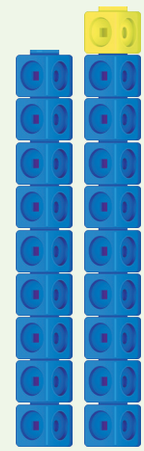
(e)



9 + 9 = ____



9 + 8 = ____



9 + 10 = ____

2. Use doubles and near doubles to complete the equations.

(a) 8 + ____ = 16

(b) 6 + ____ = 12

(c) ____ + 7 = 15

(d) 7 + ____ = 14

(e) 6 + ____ = 11

(f) ____ + 7 = 13

(g) ____ + 9 = 18

(h) 8 + ____ = 14

(i) ____ + 9 = 19

(j) ____ + 10 = 20

At Home

1. Use doubles and near doubles to complete the equations.

(a) 8 + 8 = ☐

(b) 8 + 9 = ☐

(c) 7 + 6 = ☐

(d) 9 + 10 = ☐

(e) 9 + 8 = ☐

(f) 6 + 7 = ☐

2. Add.

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

(b)
$$\begin{array}{r} 7 \\ +\ 7 \\ \hline \square \end{array}$$

(c)
$$\begin{array}{r} 10 \\ +\ 9 \\ \hline \square \end{array}$$

(d)
$$\begin{array}{r} 10 \\ +\ 10 \\ \hline \square \end{array}$$

(e)
$$\begin{array}{r} 9 \\ +\ 9 \\ \hline \square \end{array}$$

(f)
$$\begin{array}{r} 8 \\ +\ 7 \\ \hline \square \end{array}$$

3. Use doubles and near doubles to complete the equations.

(a) 8 + ☐ = 15

(b) 6 + ☐ = 13

(c) ☐ + 10 = 20

(d) 8 + ☐ = 17

(e) 5 + ☐ = 11

(f) ☐ + 7 = 16

Solve It!

Sophie sorted her blocks into two piles.
She wanted a quick way to find out how many blocks she had.

(a) Her first pair of piles had 8 blocks each. Draw the blocks and show how many she had. How many did she have in all?

Sophie has _____ blocks in all.

(b) When she looked under the bed, she found 3 more blocks. Show the new piles she had. How many did she have in all now?

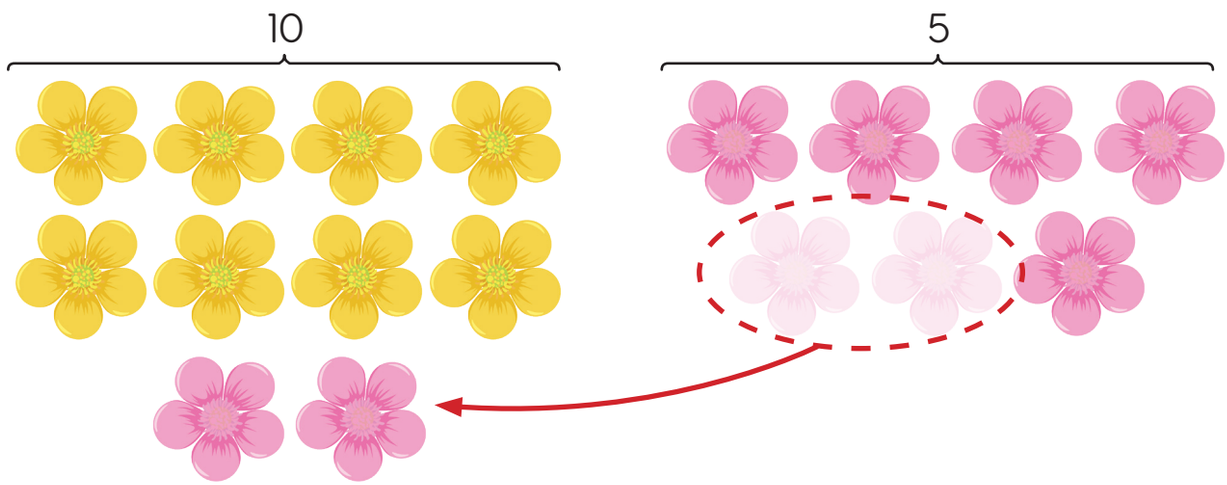
Sophie has _____ blocks in all.

Adding by Making 10

Let's Learn

Halle has 8 flowers.
Chelsea gives her 7 more flowers.
How many flowers does Halle have in all?

Make a group of 10 and add the ten and ones.

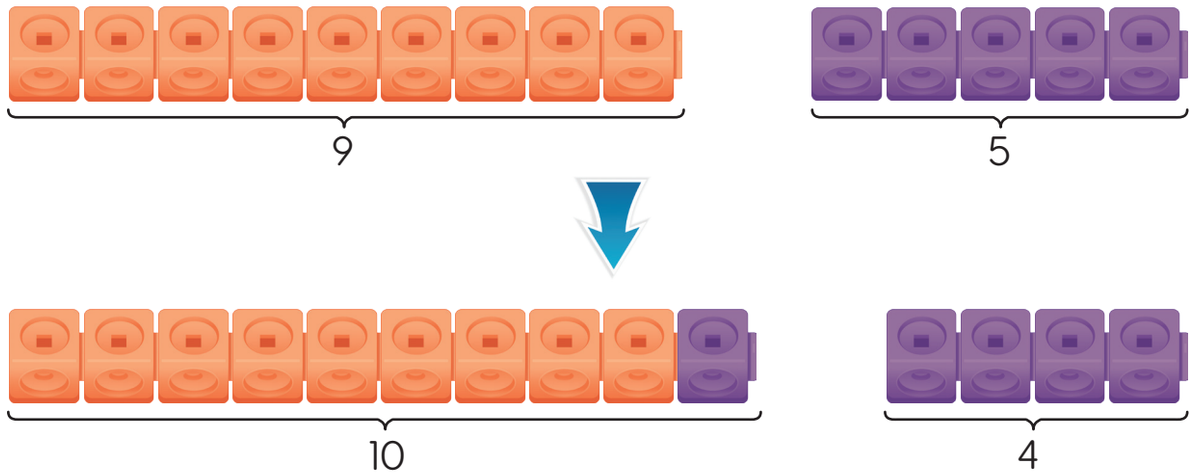


10 + 5 = 15
Halle has 15 flowers in all.

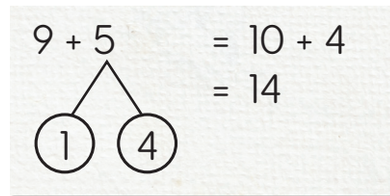
8 + 7 = 10 + 5
= 15

2 5

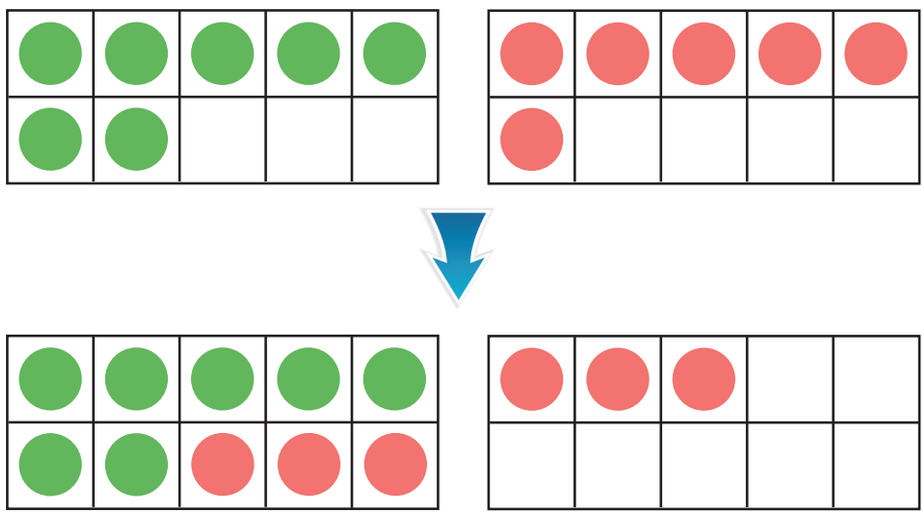
There are 9 orange cubes and 5 purple cubes.
How many cubes are there altogether?



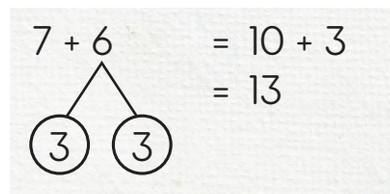
10 + 4 = 14
There are
14 cubes altogether.



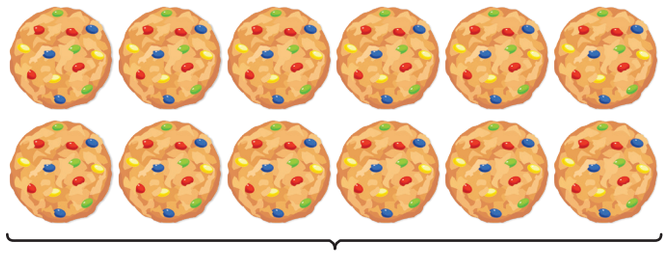
Find 7 + 6.

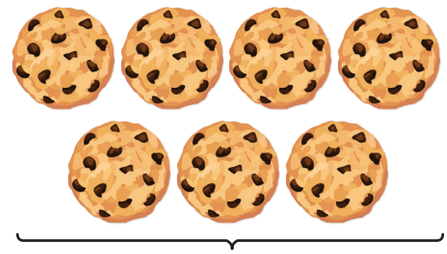


7 + 6 = 13

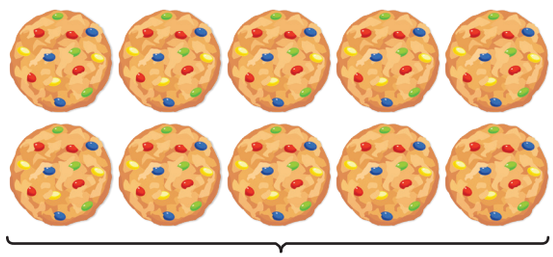


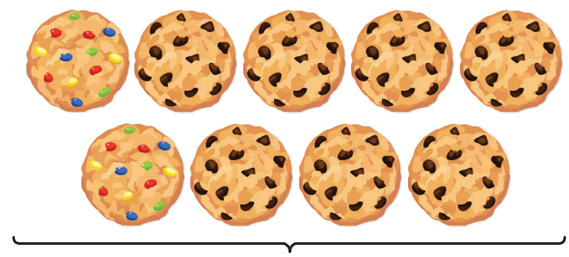
How many cookies in all?
Let's find 12 + 7.

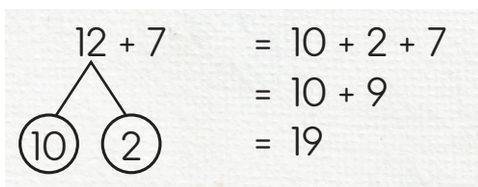




Make a group of 10 and add the ten and ones.

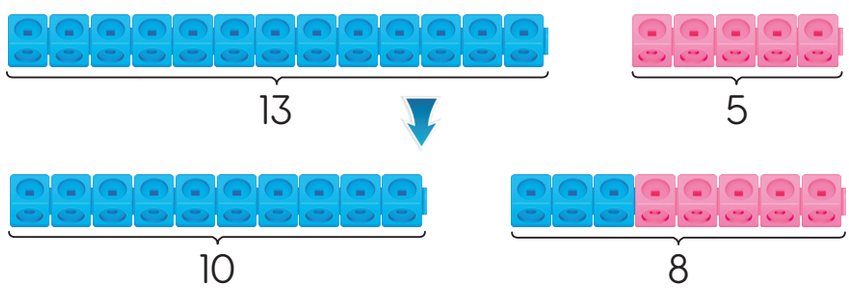




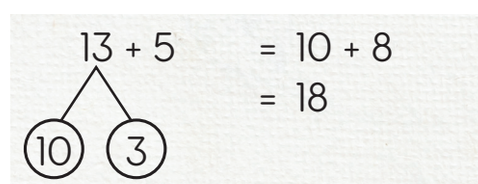


12 + 7 = 19

Find 13 + 5.



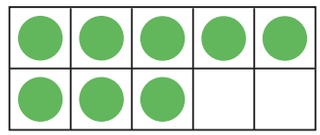
13 + 5 = 18

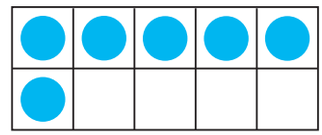


Let's Practice

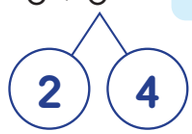
1. Make a ten.
Fill in the blanks.

(a)





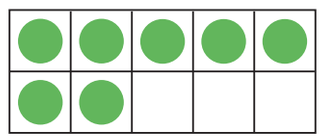
8 + 6 =

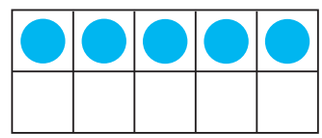


8 + 2 = 10

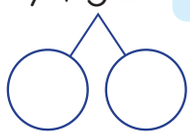
10 + 4 = 14

(b)





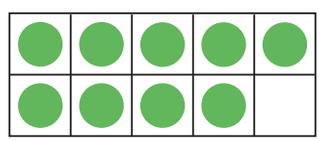
7 + 5 =

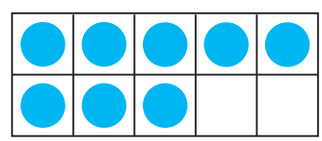


\+ =

\+ =

(c)



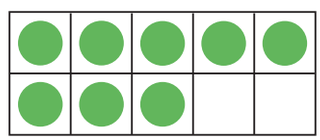


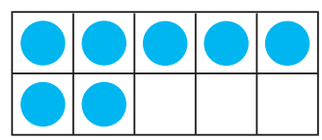
9 + 8 =

\+ =

\+ =

(d)





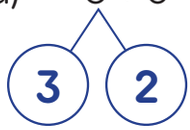
8 + 7 =

\+ =

\+ =

2. Make a ten.
Fill in the blanks.

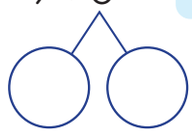
(a) 5 + 8 =



8 + 2 = 10

10 + 3 = 13

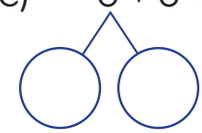
(b) 9 + 5 =



__ + __ = __

__ + __ = __

(c) 6 + 8 =



__ + __ = __

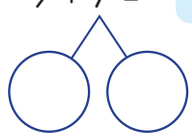
__ + __ = __

(d) 7 + 8 =

__ + __ = __

__ + __ = __

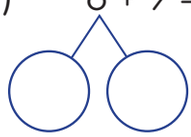
(e) 9 + 7 =



__ + __ = __

__ + __ = __

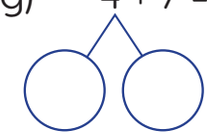
(f) 8 + 9 =



__ + __ = __

__ + __ = __

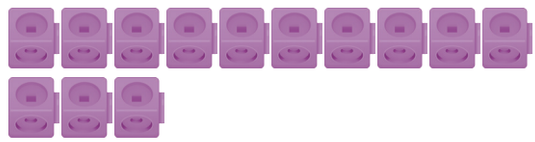
(g) 4 + 7 =

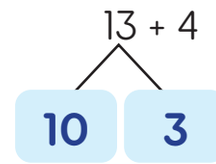


__ + __ = __

__ + __ = __

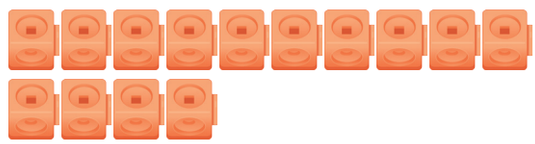
3. Make a ten.
Fill in the blanks.

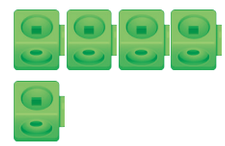
(a) 

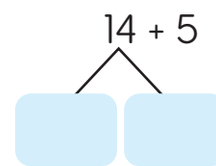


13 + 4 = 10 + 7

= ____

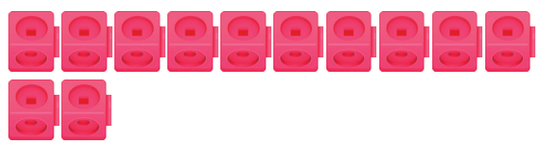
(b) 

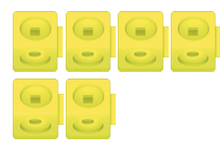


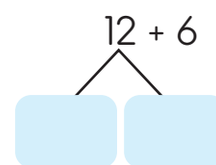


14 + 5 = ____ + ____

= ____

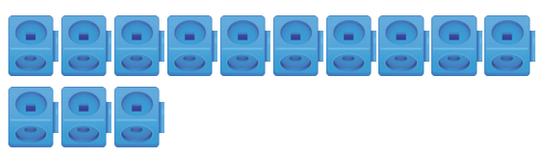
(c) 

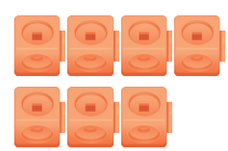


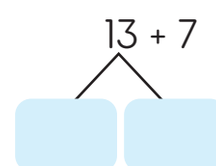


12 + 6 = ____ + ____

= ____

(d) 





13 + 7 = ____ + ____

= ____

4. Make a ten.
Fill in the blanks.

(a) 15 + 4 = 10 + 9
=

(b) 12 + 7 = +
=

(c) 14 + 6 = +
=

(d) 13 + 6 = +
=

(e) 11 + 8 = +
=

(f) 14 + 4 = +
=

(g) 12 + 5 = +
=

At Home

1. Complete the equations.

(a) 7 + 9 = ☐

(b) 11 + 9 = ☐

(c) 14 + 5 = ☐

(d) 13 + 5 = ☐

(e) 7 + 6 = ☐

(f) 9 + 8 = ☐

2. Add.

(a)
$$\begin{array}{r} 15 \\ +\ 4 \\ \hline \square \end{array}$$

(b)
$$\begin{array}{r} 7 \\ +\ 8 \\ \hline \square \end{array}$$

(c)
$$\begin{array}{r} 14 \\ +\ 4 \\ \hline \square \end{array}$$

(d)
$$\begin{array}{r} 12 \\ +\ 6 \\ \hline \square \end{array}$$

(e)
$$\begin{array}{r} 14 \\ +\ 5 \\ \hline \square \end{array}$$

(f)
$$\begin{array}{r} 12 \\ +\ 5 \\ \hline \square \end{array}$$

3. Complete the equations.

(a) 9 + ☐ = 15

(b) 6 + ☐ = 19

(c) ☐ + 8 = 17

(d) 3 + ☐ = 17

(e) 5 + ☐ = 12

(f) ☐ + 7 = 18

(g) 6 + ☐ = 18

(h) 6 + ☐ = 15

(i) ☐ + 15 = 17

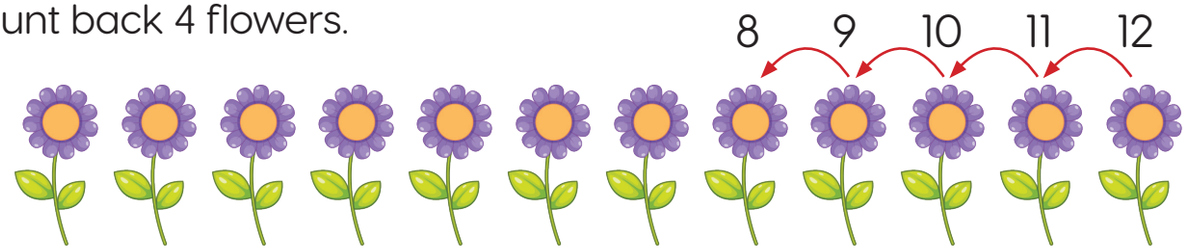
(j) 8 + ☐ = 20

Subtraction by Counting Back

Let's Learn

Sophie has 12 flowers.
She gives her friend 4 flowers.
How many flowers does she have left?

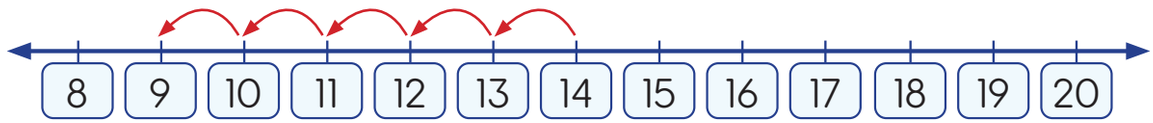
Count back 4 flowers.



12 – 4 = 8
Sophie has 8 flowers left.

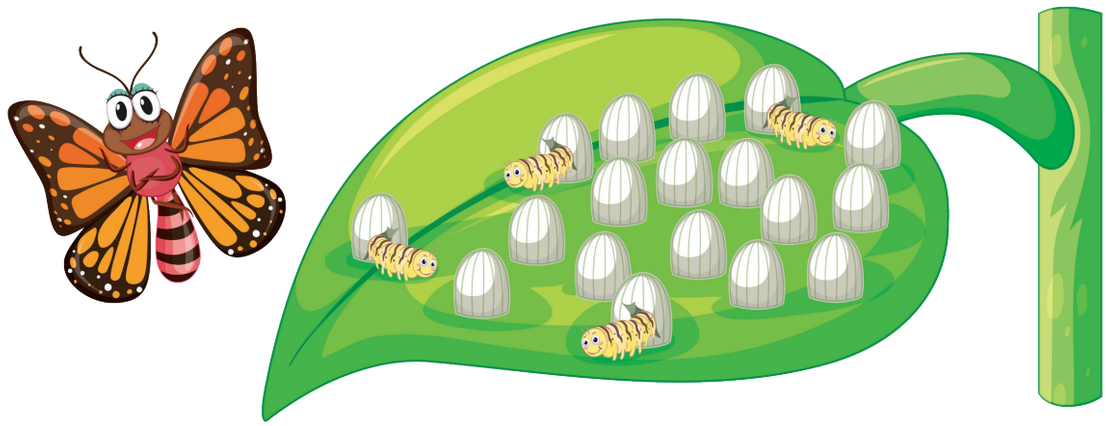
There are 14 chocolates in a box.
Blake eats 5 chocolates.
How many chocolates are left?

Let's count back from 14 to find the answer.

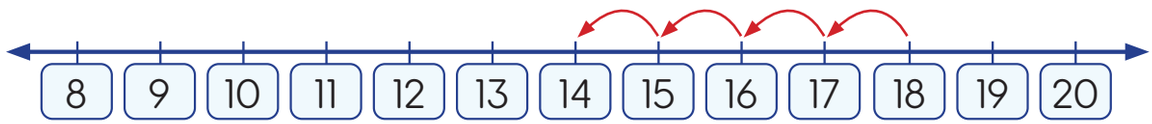


14 – 5 = 9
There are 9 chocolates left.

A butterfly lays 18 eggs.
4 eggs hatch.
How many eggs did not hatch?

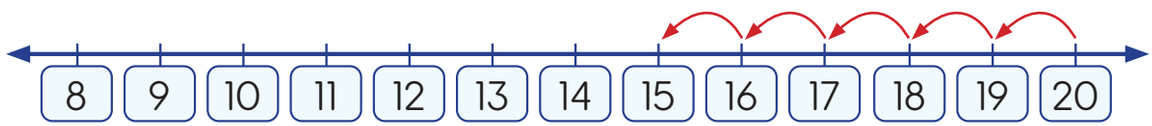


Let's count back from 18.



18 – 4 = 14
14 of the eggs did not hatch.

Find 5 less than 20 by counting back on a number line.



20 – 5 = 15

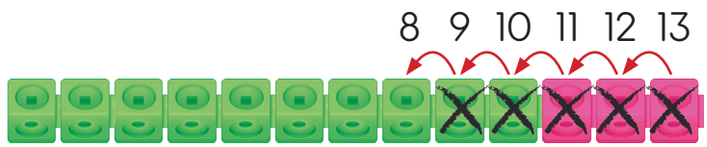
Let's Practice

1. Count back to subtract.

(a)

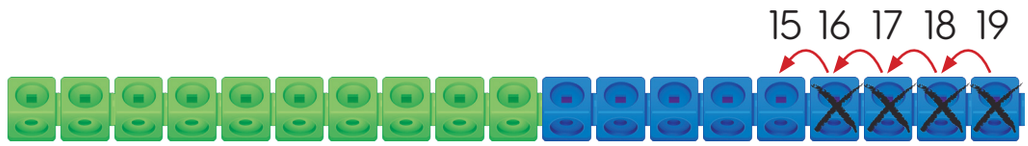
16 – 4 = ☐

(b)



13 – 5 = ☐

(c)

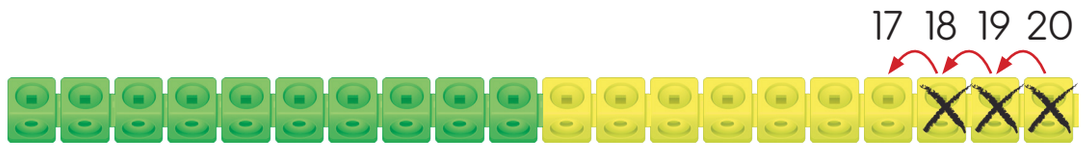


19 – 4 = ☐

(d)

17 – 5 = ☐

(e)



20 – 3 = ☐