



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:



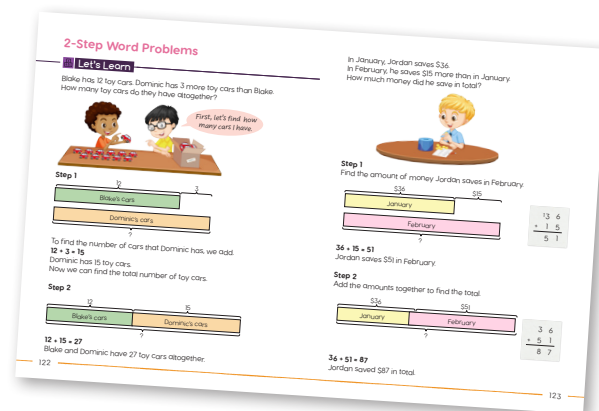
Anchor Task

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.

Let's Practice

1. Compare the lengths of the objects. Fill in the blanks.

(a) The toothpaste has a length of cm.
 (b) The comb has a length of cm.
 (c) The toothbrush has a length of cm.
 (d) The comb is cm shorter than the toothpaste.
 (e) The toothbrush is cm longer than the comb.
 (f) The is the longest.
 The is the shortest.

2. Compare the lengths of the objects. Fill in the blanks.

(a) The trumpet is cm longer than the clarinet.
 (b) The trumpet is cm longer than the violin.
 (c) The violin is cm shorter than the clarinet.
 (d) The is the longest.
 (e) The is the shortest.
 (f) Arrange the objects from the longest to shortest.

211

At Home

1. Hilda asked her friends their favorite fruit. She made a table from the data she collected.

What's your favorite fruit?

My Friends' Favorite Fruits				
Fruit	Apple	Banana	Peach	Mango
Number of friends	8	3	7	6

Help Hilda make a bar graph from the table.

My Friends' Favorite Fruits

2. Mika made a bar graph from the table. Answer the questions and use the space to show your working.

Class 2A's Favorite Drink				
Drink	Milk	Orange juice	Apple juice	
Number of people	10	3	8	1

Class 2A's Favorite Drink

297

Hands On

Play this game in groups of 3 or 4.

- Place different 3-D shapes on your table.
- One player describes a shape by saying the number of faces, edges and vertices.

This 3-D shape has 2 faces.

- The first player to pick the correct shape is the winner and describes the next shape.

It's a cylinder!

80

Solve It!

1. A beetle is crawling around a garden. It starts at position A and crawls for 36 m. At which position does the beetle stop?

The beetle stops at position .

2. Jordan is running around the soccer field. He starts at position A and runs for 450 m. At which position does he stop?

Jordan stops at position .

215

Looking Back

1. Write the number in numerals and words.

(a)

(b)

2. Fill in the blank.

(a)

500 = + 500

(b)

250 = + 200

3. Fill in the blanks. Write the number in numerals and words.

Hundreds	Tens	Ones
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

4. Write the number.

The digit 9 is in the ones place.
 The digit 5 is in the hundred place.
 The digit 2 is in the tens place.

242

243

Contents

1	Addition and Subtraction to 20	2
	Adding by Counting On	4
	Adding Using Doubles and Near Doubles	14
	Adding by Making 10	20
	Subtraction by Counting Back	28
	Subtraction Using Double Facts	34
	Subtraction by Making 10	37
2	Addition and Subtraction to 100	60
	Addition Without Regrouping	65
	Addition With Regrouping	74
	Adding Multiple Two-digit Numbers	84
	1-Step Addition Word Problems	90
	Subtraction Without Regrouping	100
	Subtraction With Regrouping	108
	1-Step Subtraction Word Problems	114
	2-Step Word Problems	122
3	Numbers to 1,000	140
	Hundreds, Tens and Ones	142
	Place Value to 1,000	158
	Comparing Numbers to 1,000	178
	Odd and Even Numbers	198
	Skip Counting and Number Patterns	216
	Repeated Addition and Arrays	229



4 Addition to 1,000

248

Adding 100s and 10s

250

Addition Without Regrouping

258

Addition With Regrouping

272



Addition and Subtraction to 20



Anchor Task

1

5

6

2

4

7

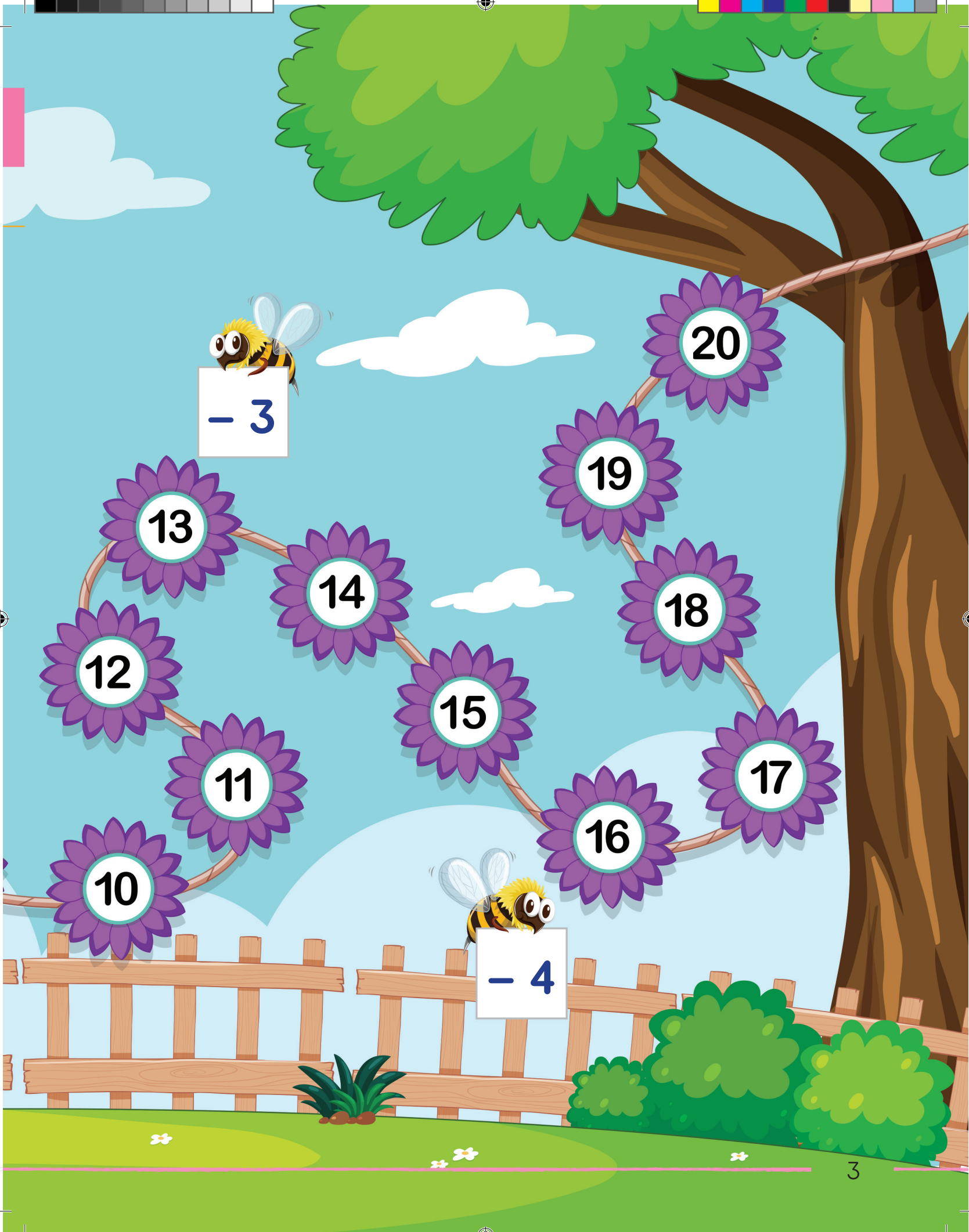
3

+ 2

8

9

+ 5



- 3

- 4

Adding by Counting On

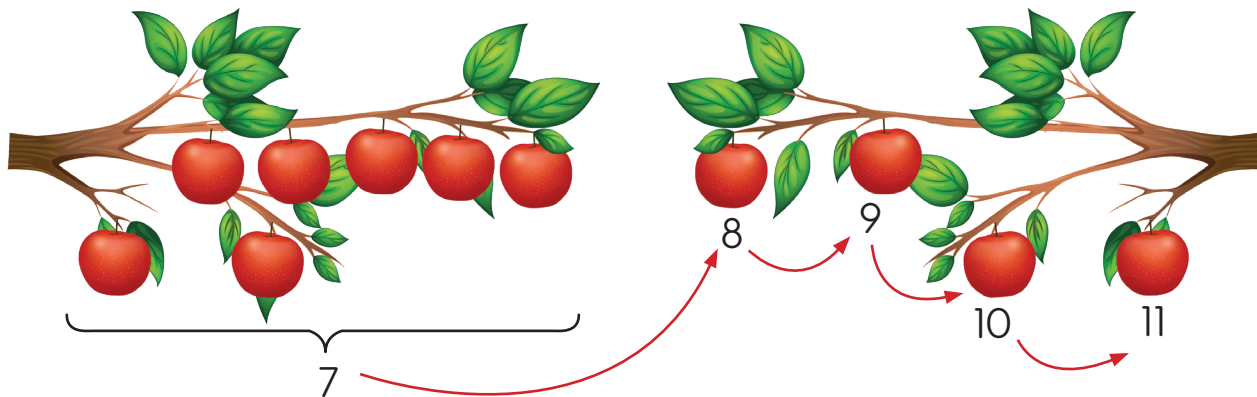


Let's Learn

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



Count on from the greater number.

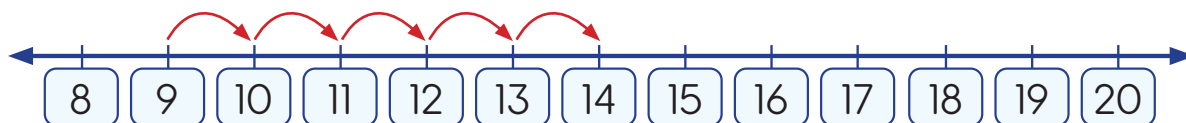


$$7 + 4 = 11$$

There are 11 apples in all.

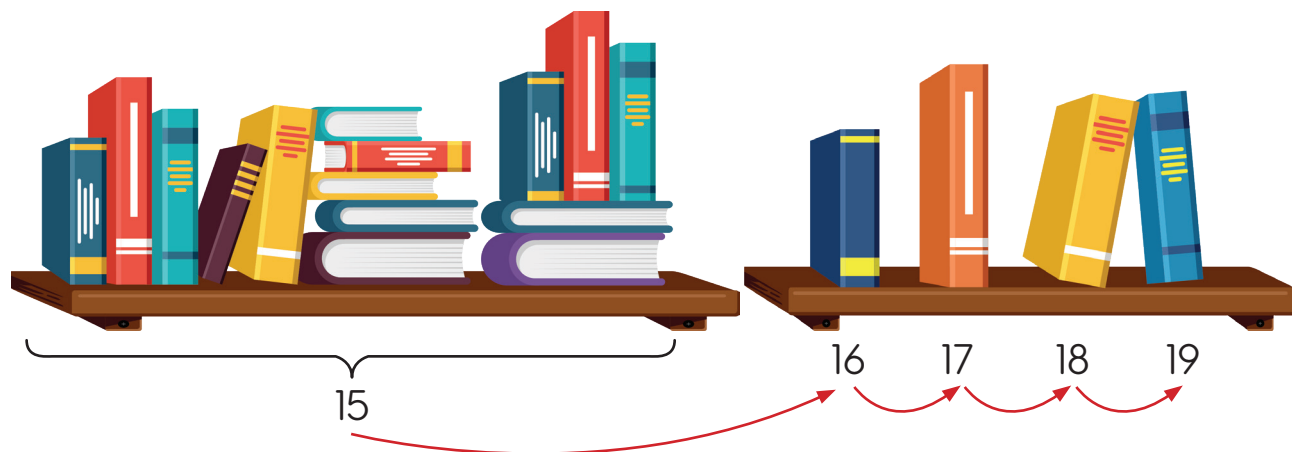
Find $9 + 5$.

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 $3 + 15$.

Count on from 15 on
a number line.

Count on your fingers.
15, 16, 17, 18.



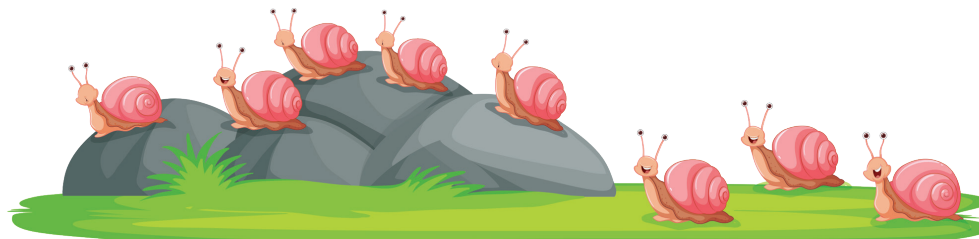
$$3 + 15 = 18$$



Let's Practice

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

(a)



$$5 + 3 = 8$$

(b)



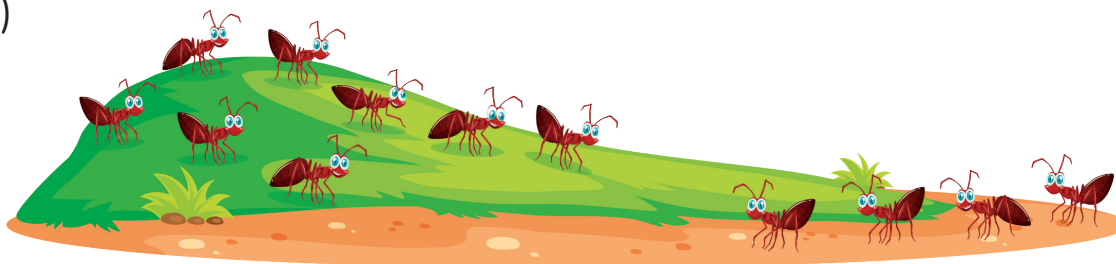
$$\square + \square = \square$$

(c)



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

(d)



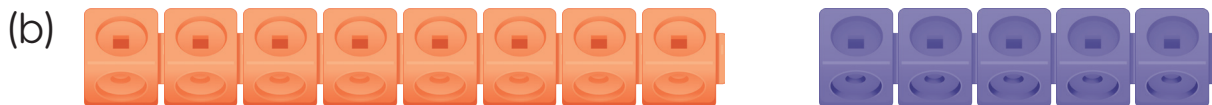
$$\square + \square = \square$$



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



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



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

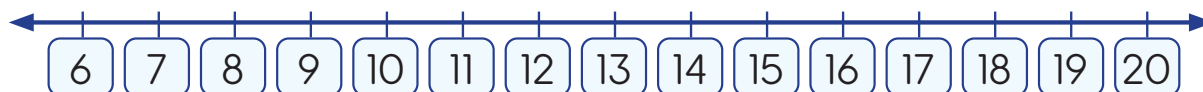


$$\square + \square = \square$$



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

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



(a) $6 + 5 = \square$

(b) $3 + 8 = \square$

(c) $5 + 8 = \square$

(d) $5 + 9 = \square$

(e) $4 + 9 = \square$

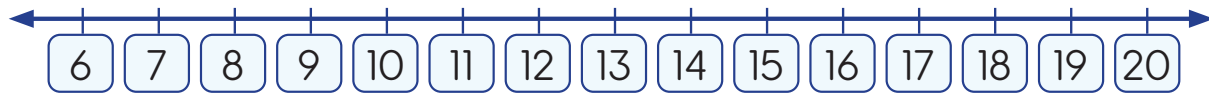
(f) $5 + 7 = \square$

(g) $7 + 3 = \square$

(h) $9 + 2 = \square$



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) $1 + 14 =$

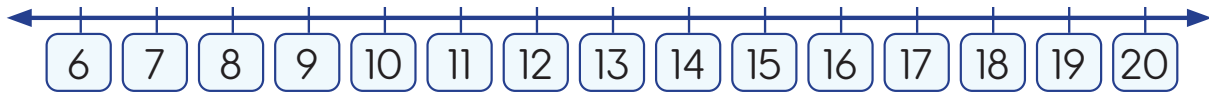
A

-
- 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)
$$\begin{array}{r} 11 \\ + 3 \\ \hline \end{array}$$

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

(c)
$$\begin{array}{r} 12 \\ + 3 \\ \hline \end{array}$$

(d)
$$\begin{array}{r} 17 \\ + 1 \\ \hline \end{array}$$

(e)
$$\begin{array}{r} 10 \\ + 6 \\ \hline \end{array}$$

(f)
$$\begin{array}{r} 12 \\ + 2 \\ \hline \end{array}$$

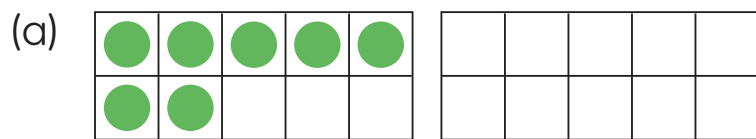
(g)
$$\begin{array}{r} 12 \\ + 1 \\ \hline \end{array}$$

(h)
$$\begin{array}{r} 13 \\ + 5 \\ \hline \end{array}$$

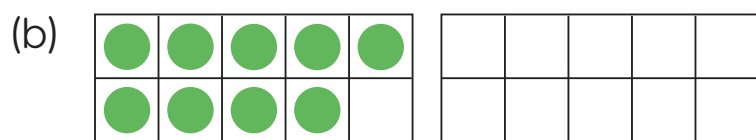
(i)
$$\begin{array}{r} 16 \\ + 3 \\ \hline \end{array}$$



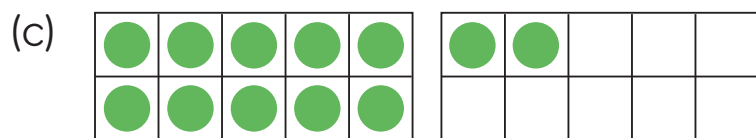
3. Color the ten frames to find the missing addend.
Complete the equation.



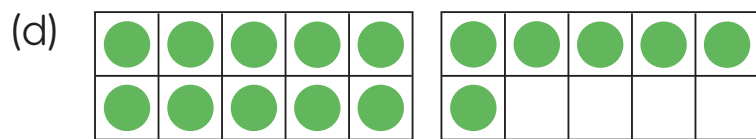
$$7 + \square = 11$$



$$9 + \square = 14$$



$$12 + \square = 17$$



$$16 + \square = 20$$

4. Complete the equations.

(a) $8 + \square = 12$

(b) $9 + \square = 14$

(c) $\square + 4 = 13$

(d) $15 + \square = 19$

(e) $16 + \square = 18$

(f) $\square + 3 = 19$

(g) $\square + 4 = 17$

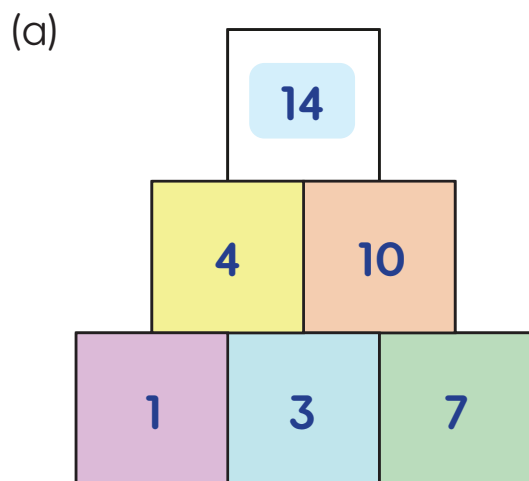
(h) $14 + \square = 15$

(i) $\square + 2 = 20$

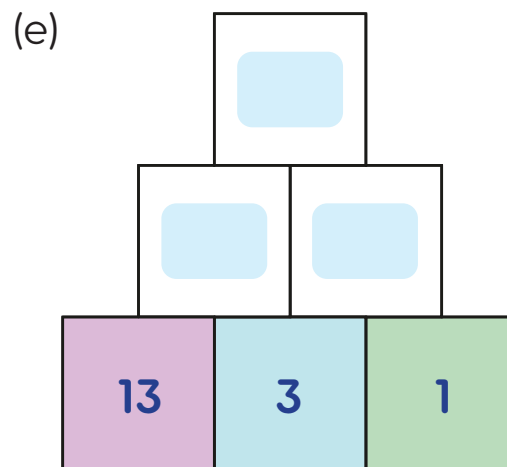
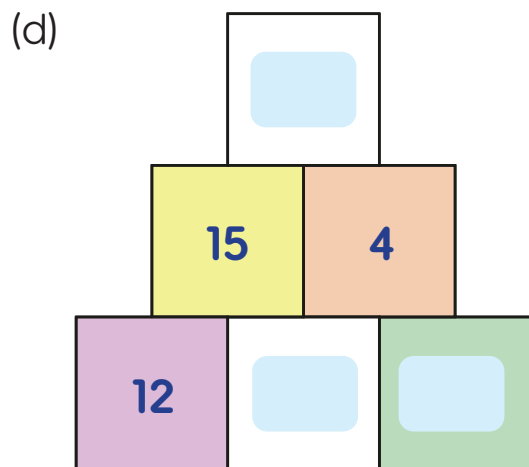
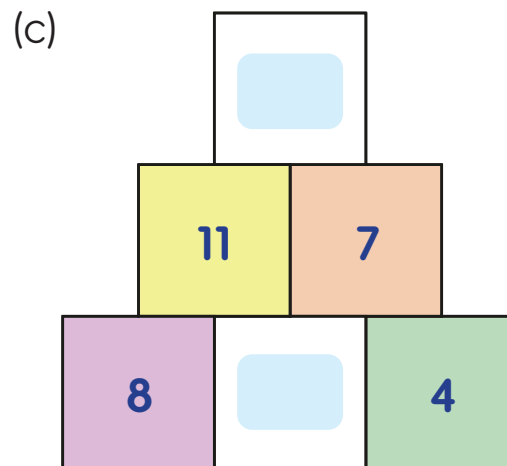
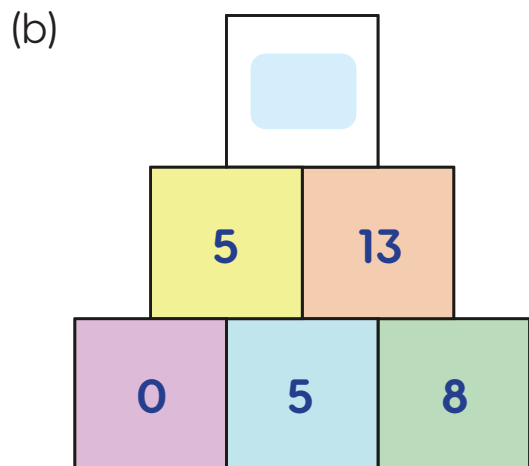
(j) $\square + 11 = 16$

 **Solve It!**

1. Fill in the missing numbers.



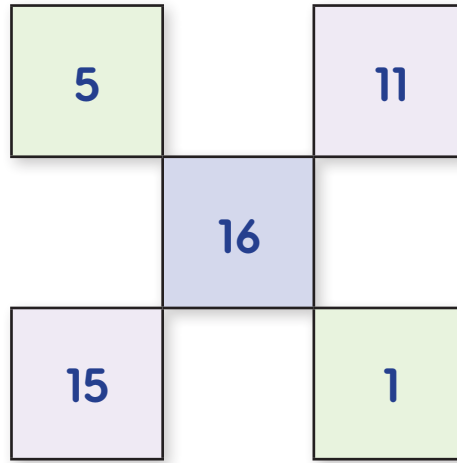
Look! $3 + 7 = 10$
Can you see a pattern?



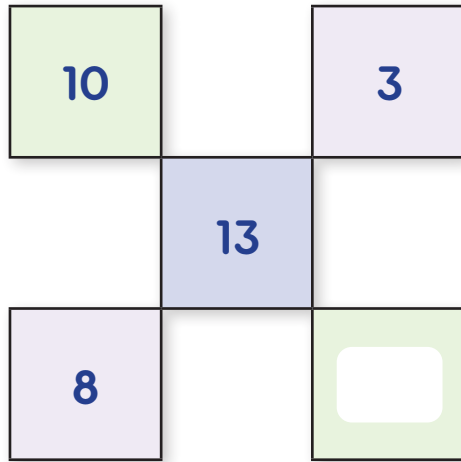
2. Fill in the missing numbers.

(a)

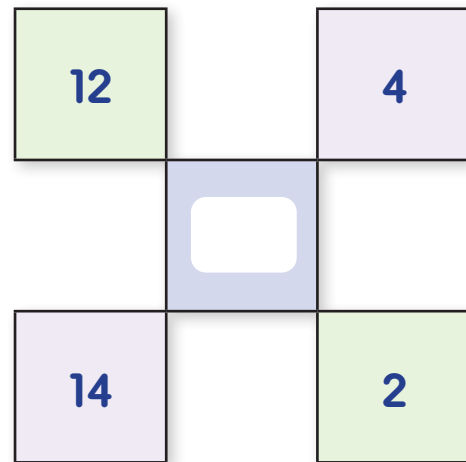
5 and 11 is 16.



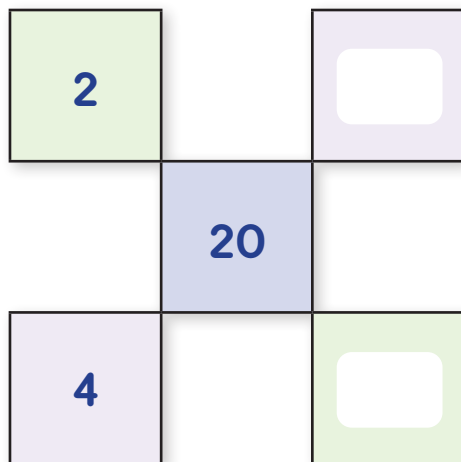
(b)



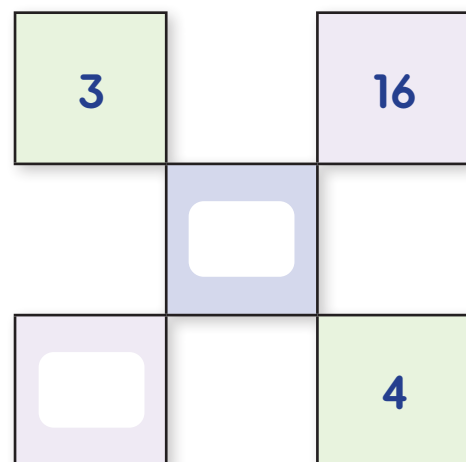
(c)



(d)



(e)



Adding Using Doubles and Near Doubles

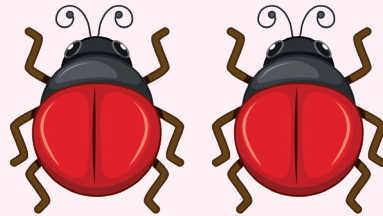
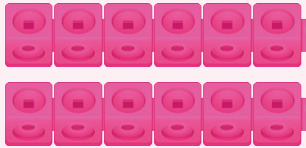


Let's Learn

We can use doubles to add.

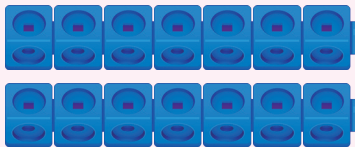
A double is when both numbers we are adding are the same.

Double 6



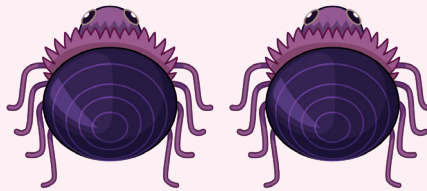
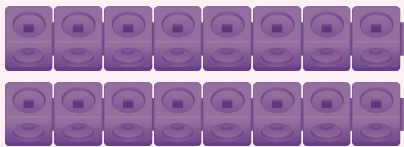
$$6 + 6 = 12$$

Double 7



$$7 + 7 = 14$$

Double 8



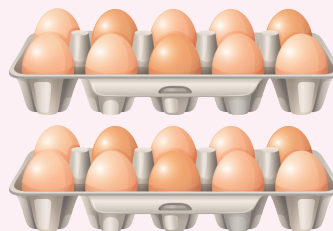
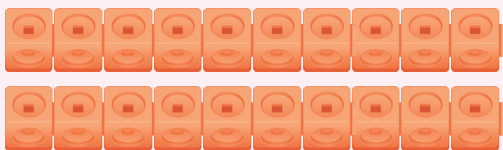
$$8 + 8 = 16$$

Double 9



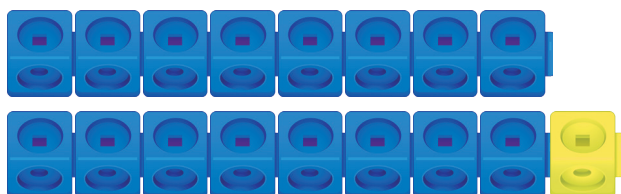
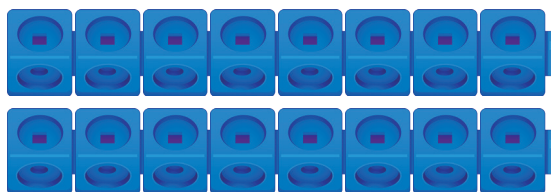
$$9 + 9 = 18$$

Double 10



$$10 + 10 = 20$$

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

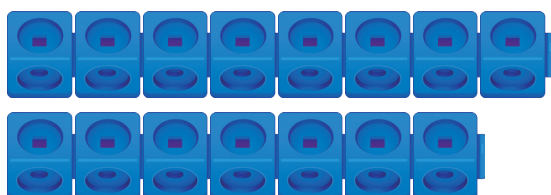
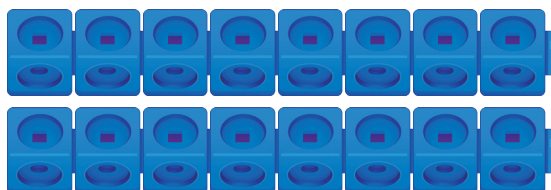


$$\begin{aligned} 8 + 9 &= 16 + 1 \\ &= 17 \end{aligned}$$

8 + 9 is the same as double 8 and one more.



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



$$\begin{aligned} 8 + 7 &= 16 - 1 \\ &= 15 \end{aligned}$$

8 + 7 is the same as double 8 and one less.

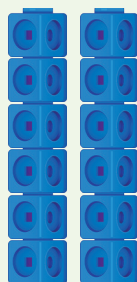




Let's Practice

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

(a)



$6 + 6 = \square$



$6 + 7 = \square$

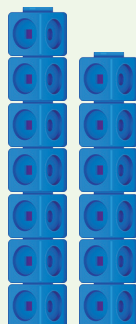


$6 + 5 = \square$

(b)



$7 + 7 = \square$



$7 + 6 = \square$

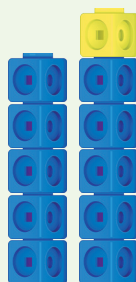


$7 + 8 = \square$

(c)



$5 + 5 = \square$



$5 + 6 = \square$



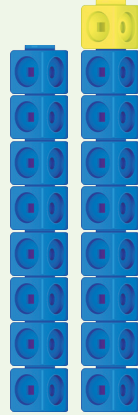
$5 + 4 = \square$



(d)



$8 + 8 = \square$

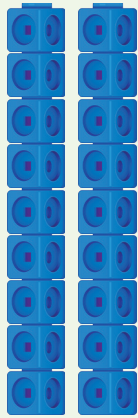


$8 + 9 = \square$



$8 + 7 = \square$

(e)



$9 + 9 = \square$



$9 + 8 = \square$



$9 + 10 = \square$

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

(a) $8 + \square = 16$

(b) $6 + \square = 12$

(c) $\square + 7 = 15$

(d) $7 + \square = 14$

(e) $6 + \square = 11$

(f) $\square + 7 = 13$

(g) $\square + 9 = 18$

(h) $8 + \square = 14$

(i) $\square + 9 = 19$

(j) $\square + 10 = 20$



At Home

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

(a) $8 + 8 = \square$

(b) $8 + 9 = \square$

(c) $7 + 6 = \square$

(d) $9 + 10 = \square$

(e) $9 + 8 = \square$

(f) $6 + 7 = \square$

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) $8 + \square = 15$

(b) $6 + \square = 13$

(c) $\square + 10 = 20$

(d) $8 + \square = 17$

(e) $5 + \square = 11$

(f) $\square + 7 = 16$



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?

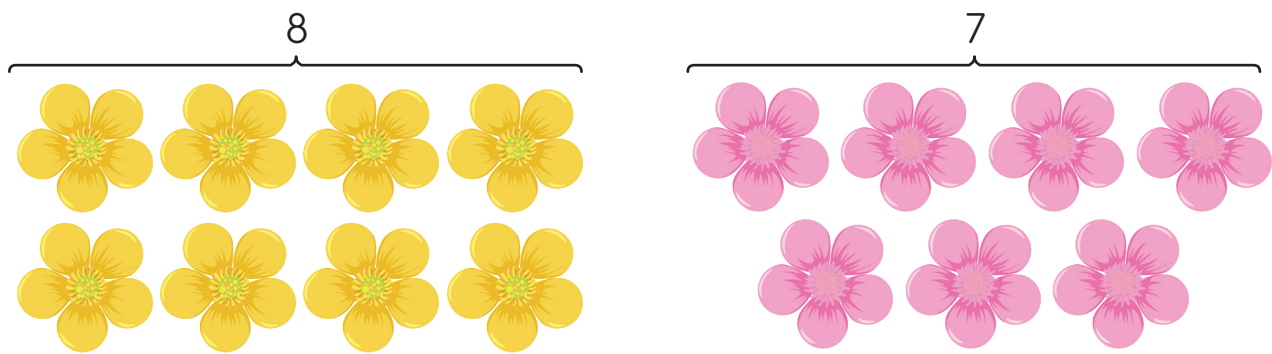


Sophie has blocks in all.

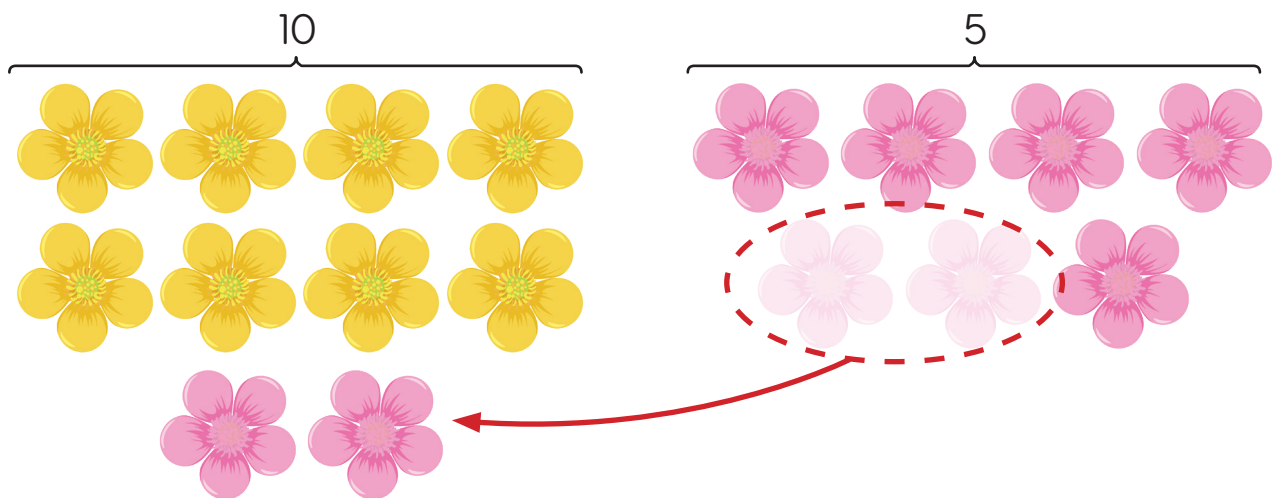
Adding by Making 10

Let's Learn

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



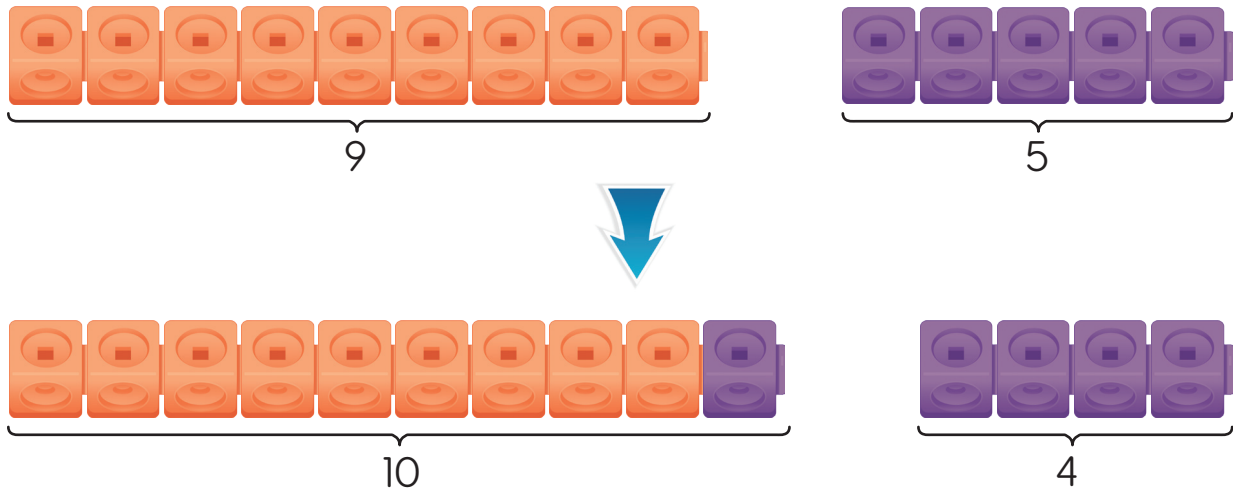
Make a group of 10 and
add the ten and ones.



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

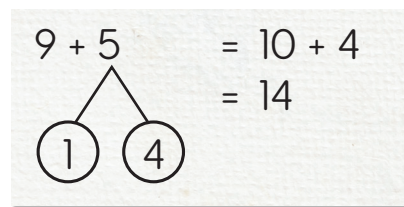
A number bond diagram for the equation $8 + 7 = 15$. The number 8 is at the top left, and the number 7 is at the top right. Lines connect them to two circles below, containing the numbers 2 and 5. To the right of this diagram, the equation is written as $= 10 + 5$ and $= 15$.

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

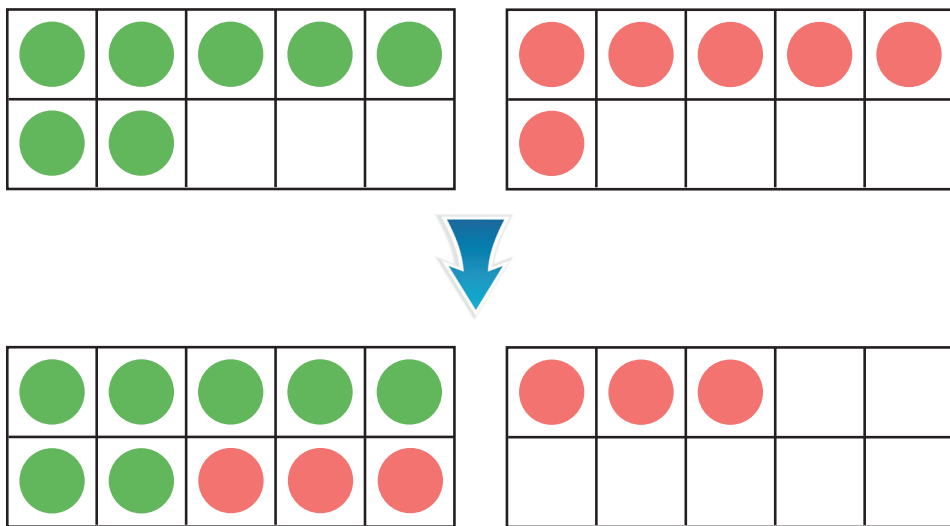


$10 + 4 = 14$

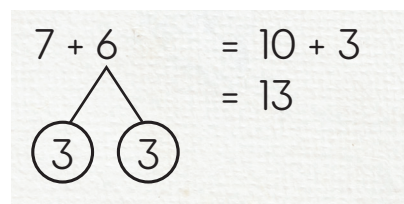
There are
14 cubes altogether.



Find $7 + 6$.



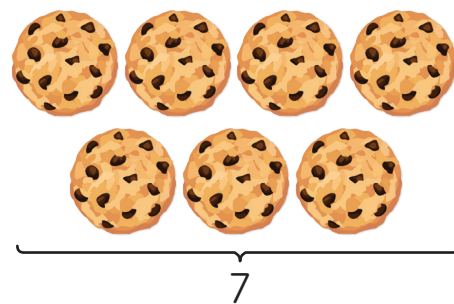
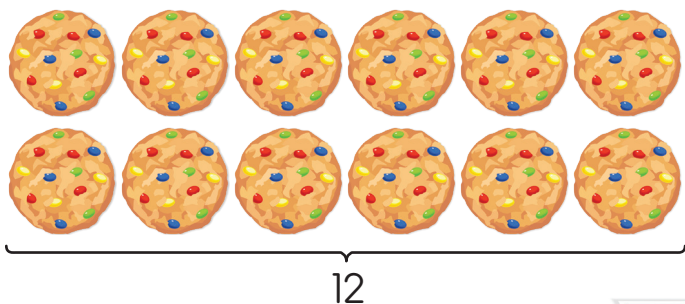
$7 + 6 = 13$



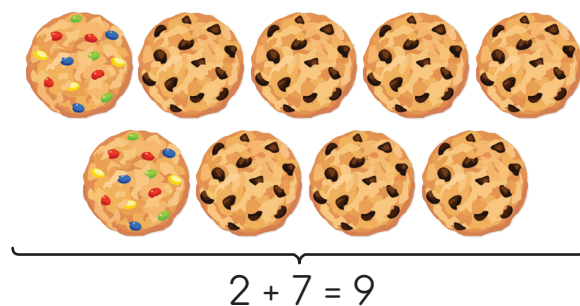
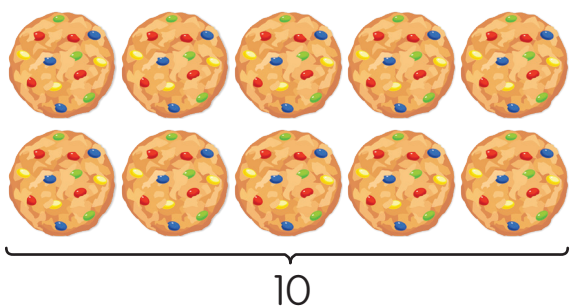


How many cookies in all?

Let's find $12 + 7$.



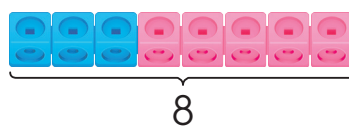
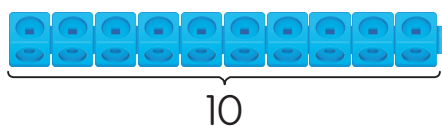
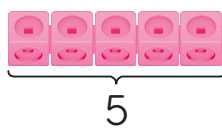
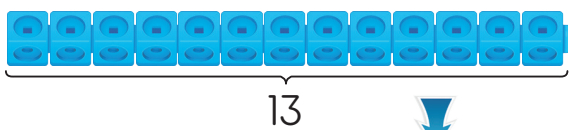
Make a group of 10 and add the ten and ones.



$12 + 7$ 	$= 10 + 2 + 7$ $= 10 + 9$ $= 19$
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$12 + 7 = 19$

Find $13 + 5$.



$13 + 5 = 18$

$13 + 5$ 	$= 10 + 8$ $= 18$
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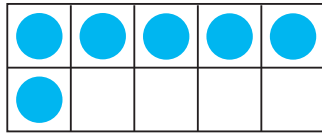
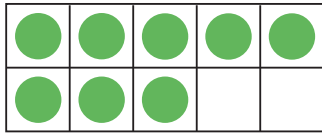




Let's Practice

1. Make a ten.
Fill in the blanks.

(a)

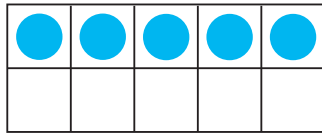
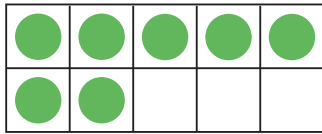


$$8 + 6 = \square$$

$$8 + 2 = 10$$

$$10 + 4 = 14$$

(b)

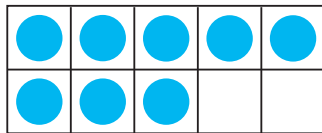
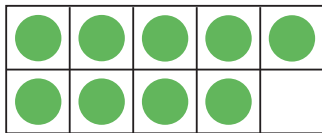


$$7 + 5 = \square$$

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

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

(c)

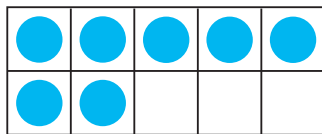
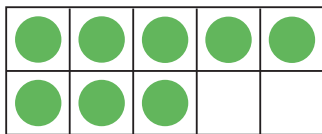


$$9 + 8 = \square$$

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

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

(d)



$$8 + 7 = \square$$

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

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



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) $9 + 7 =$

+ =
 + =

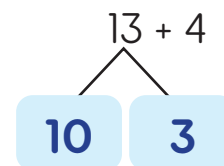
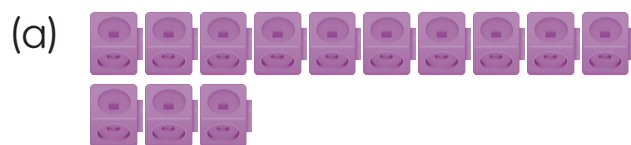
(f) $8 + 9 =$

+ =
 + =

(g) $4 + 7 =$

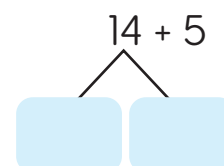
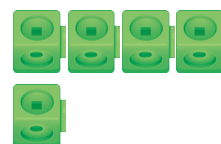
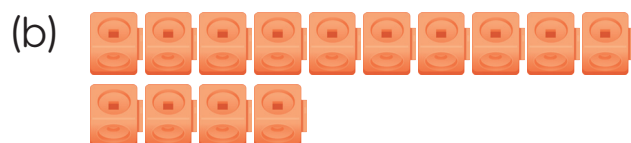
+ =
 + =

3. Make a ten.
Fill in the blanks.



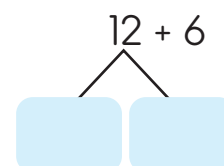
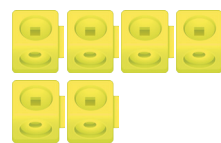
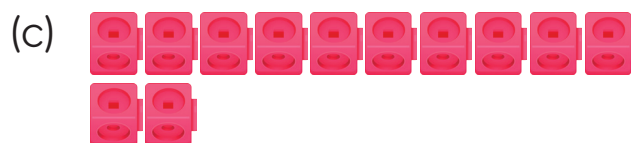
$$13 + 4 = 10 + 7$$

$$= \square$$



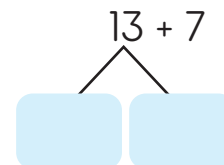
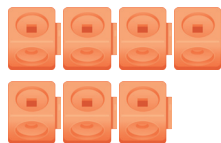
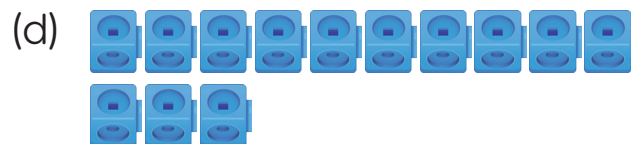
$$14 + 5 = \square + \square$$

$$= \square$$



$$12 + 6 = \square + \square$$

$$= \square$$



$$13 + 7 = \square + \square$$

$$= \square$$



4. Make a ten.
Fill in the blanks.

$$\begin{aligned} \text{(a)} \quad 15 + 4 &= \boxed{10} + \boxed{9} \\ &= \boxed{} \end{aligned}$$

$$\begin{aligned} \text{(b)} \quad 12 + 7 &= \boxed{} + \boxed{} \\ &= \boxed{} \end{aligned}$$

$$\begin{aligned} \text{(c)} \quad 14 + 6 &= \boxed{} + \boxed{} \\ &= \boxed{} \end{aligned}$$

$$\begin{aligned} \text{(d)} \quad 13 + 6 &= \boxed{} + \boxed{} \\ &= \boxed{} \end{aligned}$$

$$\begin{aligned} \text{(e)} \quad 11 + 8 &= \boxed{} + \boxed{} \\ &= \boxed{} \end{aligned}$$

$$\begin{aligned} \text{(f)} \quad 14 + 4 &= \boxed{} + \boxed{} \\ &= \boxed{} \end{aligned}$$

$$\begin{aligned} \text{(g)} \quad 12 + 5 &= \boxed{} + \boxed{} \\ &= \boxed{} \end{aligned}$$



At Home

1. Complete the equations.

$$(a) 7 + 9 = \square$$

$$(b) 11 + 9 = \square$$

$$(c) 14 + 5 = \square$$

$$(d) 13 + 5 = \square$$

$$(e) 7 + 6 = \square$$

$$(f) 9 + 8 = \square$$

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.

$$(a) 9 + \square = 15$$

$$(b) 6 + \square = 19$$

$$(c) \square + 8 = 17$$

$$(d) 3 + \square = 17$$

$$(e) 5 + \square = 12$$

$$(f) \square + 7 = 18$$

$$(g) 6 + \square = 18$$

$$(h) 6 + \square = 15$$

$$(i) \square + 15 = 17$$

$$(j) 8 + \square = 20$$

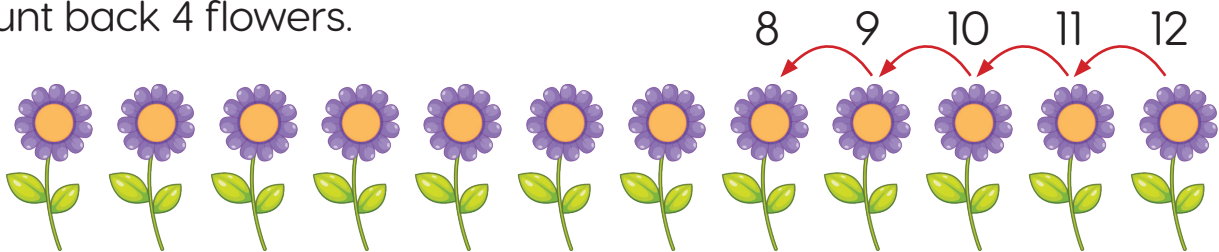
Subtraction by Counting Back

Let's Learn

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



Count back 4 flowers.



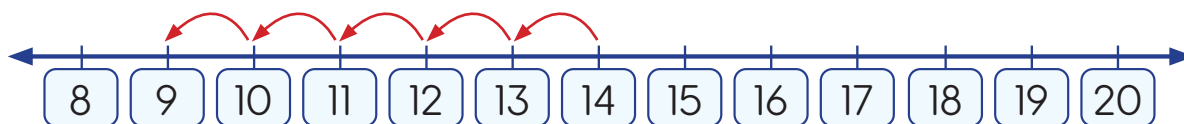
$$12 - 4 = 8$$

Sophie has 8 flowers left.

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



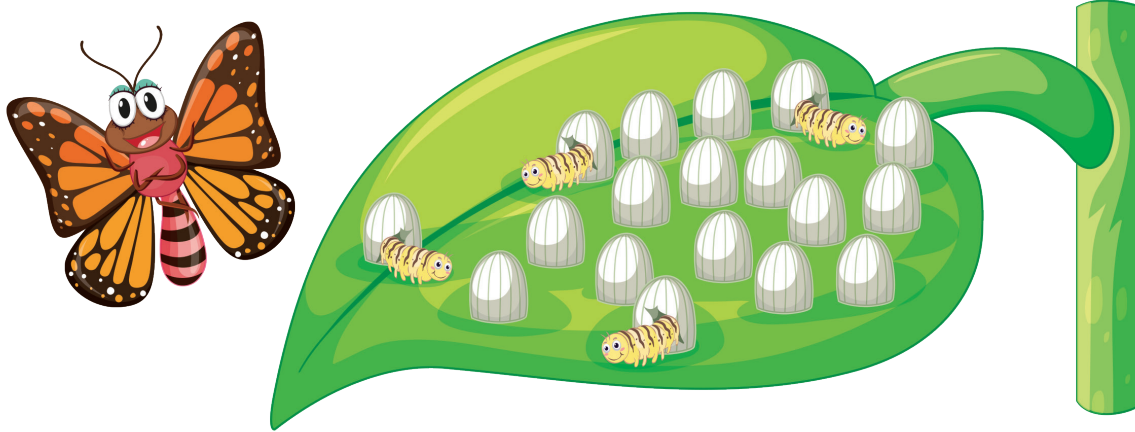
Let's count back from 14 to find the answer.



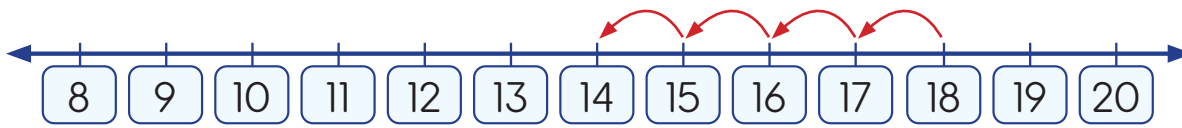
$$14 - 5 = 9$$

There are 9 chocolates left.

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



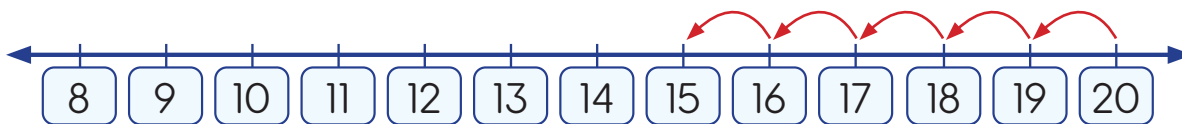
Let's count back from 18.



$$18 - 4 = 14$$

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

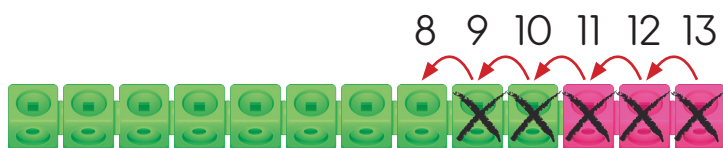
1. Count back to subtract.

(a)



$$16 - 4 = \square$$

(b)



$$13 - 5 = \square$$

(c)



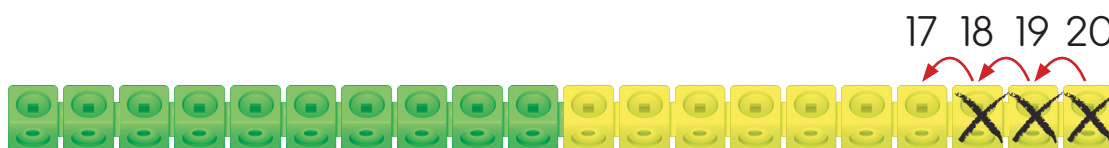
$$19 - 4 = \square$$

(d)



$$17 - 5 = \square$$

(e)



$$20 - 3 = \square$$