

www.mathseeds.com

Mathseeds Add and Subtract to 20 Grade 1 Student Book

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In this book



The Mathseeds program teaches children the core math and problem solving skills needed to be successful at school.

Each online lesson begins by introducing and modeling a mathematical concept. The child then completes a wide range of activities to practice the new skill. These activities present the content in many different ways, so children learn to use and apply each new skill in a variety of situations.

This book is designed to supplement the online program with more exercises in the core mathematical concepts. Each unit focuses on a topic within the main learning strand, presenting a series of pen and paper activities, word problems, puzzles, and games to practice their skills and understanding.

The topics in this book align with the following components of the State Standards:

I.OA.A.I Use addition and subtraction within 20 to solve word problems.

I.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.

I.OA.B.3 Apply properties of operations as strategies to add and subtract.

I.OA.B.4 Understand subtraction as an unknown-addend problem.

I.OA.C.5 Relate counting to addition and subtraction.

I.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.

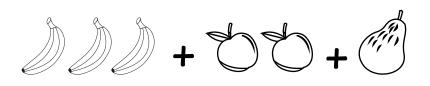
I.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

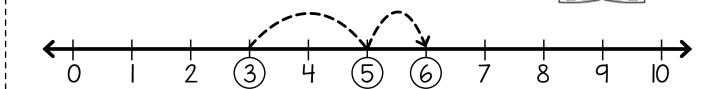
I.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

Count on to add

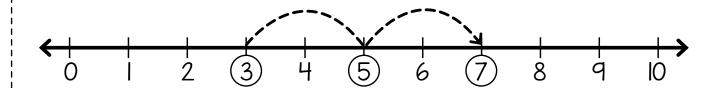
Add to 10

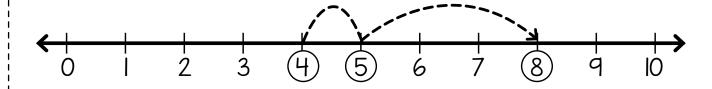
Add Mango's Fruit together.





2 Find the answers.



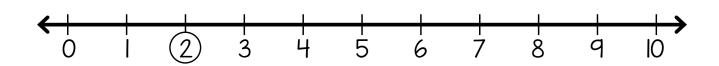


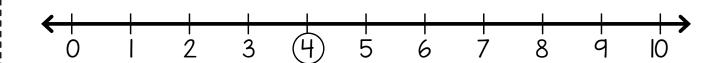
1

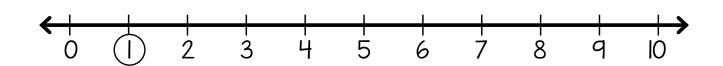
Count on a number line

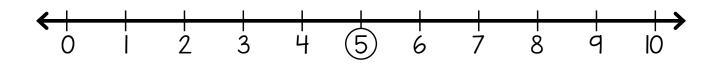
í Add to 10

Use the number lines to find the answers.





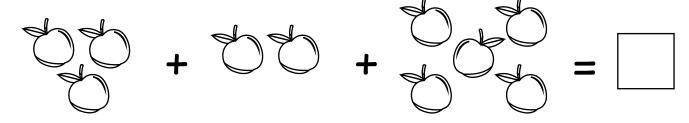




Add 3 numbers

Add to 10

Count and add.





2 Find the answers.

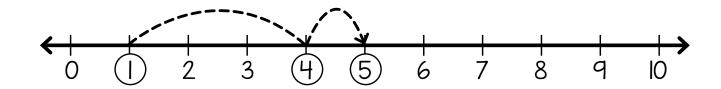
$$1+5+2=$$
 $5+3+1=$ $2+4+2=$ $4+5+1=$ $3+2+4=$ $2+5+2=$

3 Find the missing numbers.

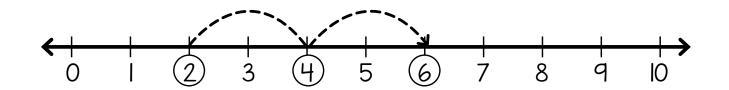
Write the sum

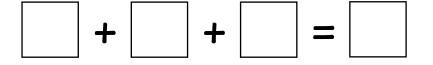
Add to 10

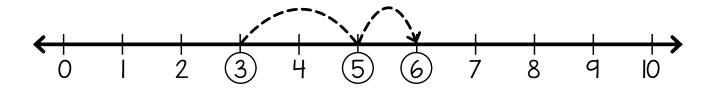
Fill in the number sentences.

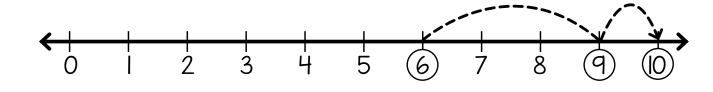


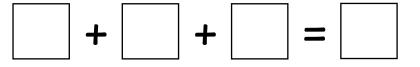
_____+ ____ = ____







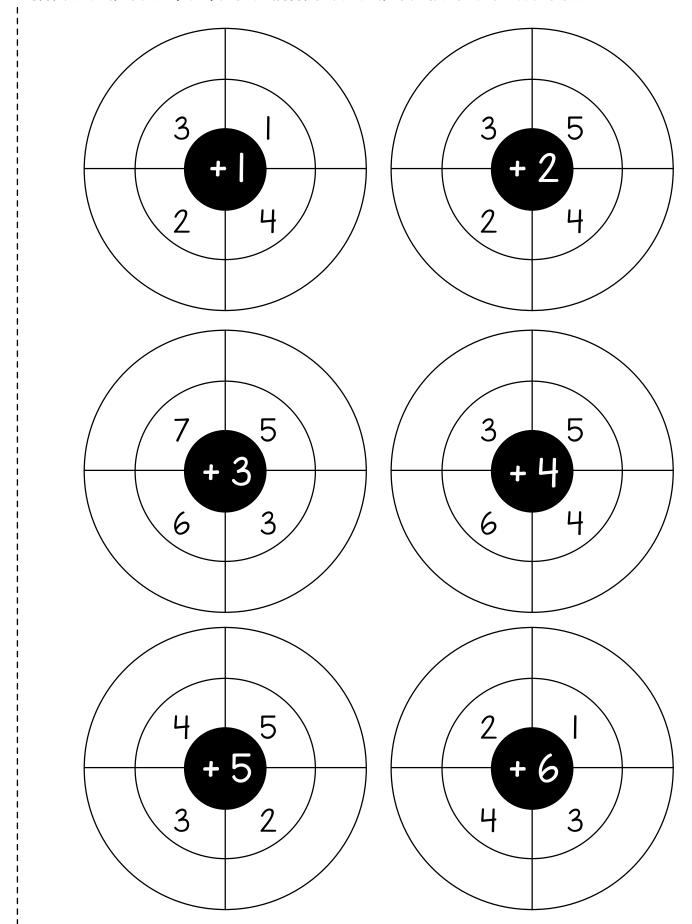




Fluent addition to 10

Add to 10

Add numbers to the middle number in each wheel.



Toy cars problem

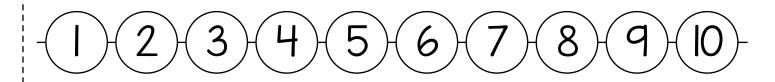
Add to 10

Read

Waldo has 5 toy cars, Mango has 3 toy cars and Doc has 2 toy cars.

How many cars altogether?

- 2 <u>Underline</u> the question. 3 Circle the facts.
- 4 Complete the number line to add.



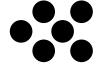
- 5 How many toy cars altogether? _____
- 6 Solve the same problem in a different way.

7 Which strategy have you used here?

Add and Subtract to 20 • Grade 1 • Topic 1

Count on from the first number. Find the answer.





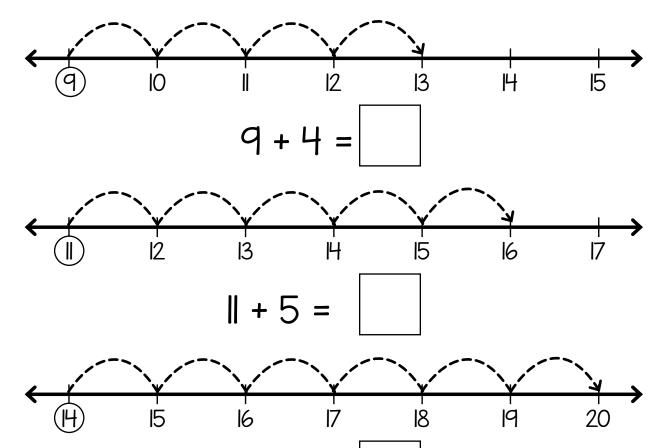


2 Count on from the larger number.

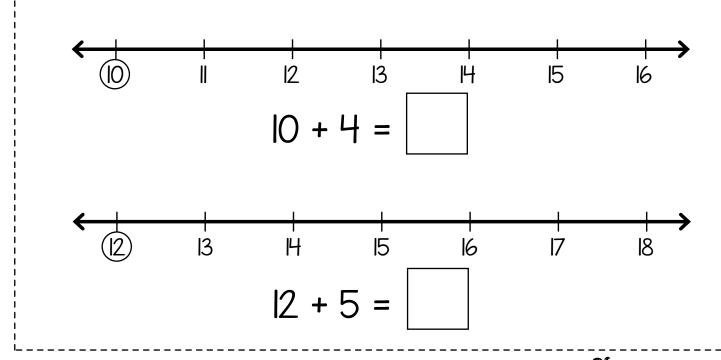
Number line addition

Add to 20

I Use the number lines to find the answers.



2 Find the answers.



H + 6 =

Number sentences

Make these sums true.

Color the true sums. Cross out the false sums.

$$2 + 5 = 9$$

$$3+6=9$$

$$\begin{cases} 1 + 5 = 17 \end{cases}$$

Write three sums which equal the same amount.

Equal sums

Add to 20

Color the sums which are equal. Cross out the sums which are not.

Match the equal sums.

$$(1+9=)$$

$$(12 + 5 =)$$

$$(10 + 9 =)$$

$$(=10+7)$$

$$(7 + 7 =)$$



Make these equal sums true.

10

The equals sign

I Put the correct sign in each box. You can use +, - or =.

- 10 5 15
- 6 3 3
- II 2 I3
- 10 2 8
- 16 I I I7

5 4 1

2 Color the equals sign when it is true. Cross it out if it is false.

4 = 3

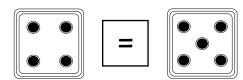
12 + 0 = 10 + 2

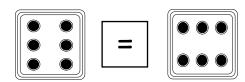
5 + 6 = 12

IO + IO | = | I8 + I

5 = 5

|| + 4 | = | 15















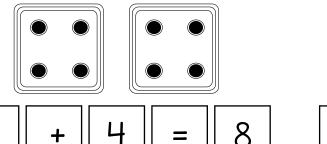


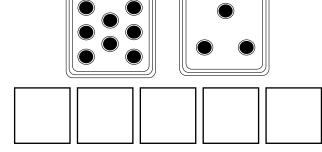


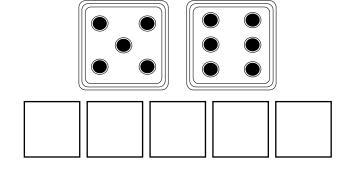
Writing sums

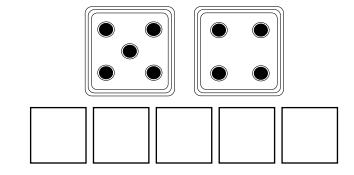
Add to 20

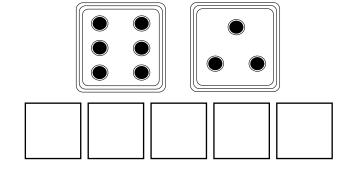
Write the sums. The first is done for you.

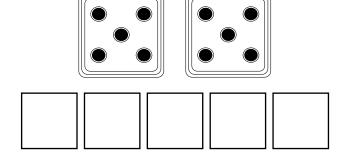


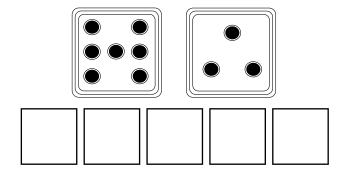


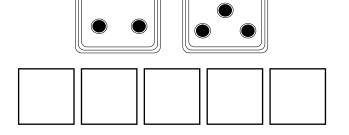












2 Draw lines to join the equal sums.

Different but the same problem (Add to 20)

Read.

Doc wrote 2 different addition equations with the same answer. What could they be?



- <u>Underline</u> the question. **3** Circle the facts.
- Solve it!

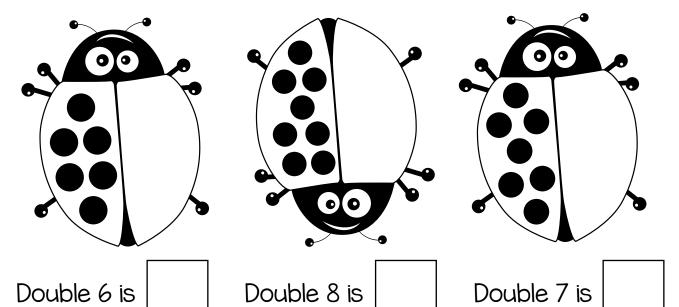
5 Which strategy did you use to solve the problem?

Find more addition equations with the same answer.

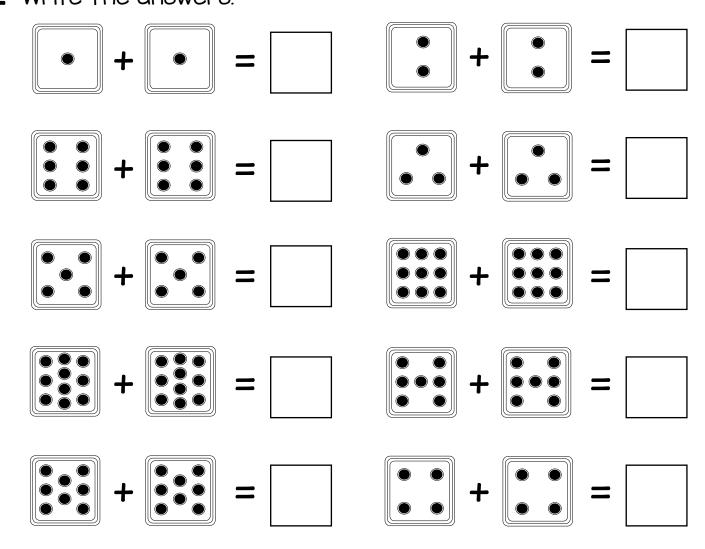
Counting doubles

Doubles

Draw matching spots. Write the answers.



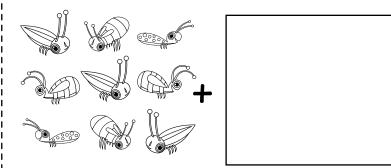
2 Write the answers.



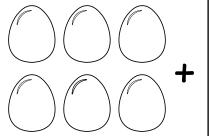
Draw doubles

Doubles

Double the number of items. Write the missing numbers.

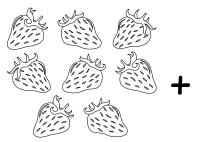


Double is



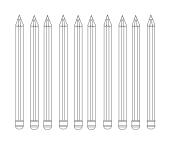


Double is



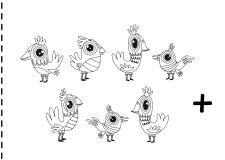


Double is





Double is

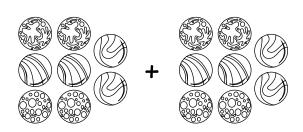


Double is

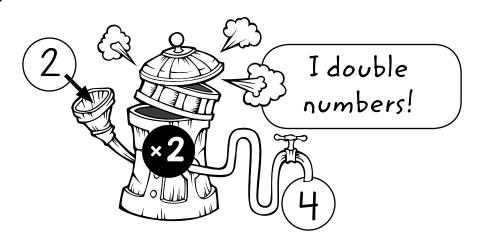
Adding doubles

Doubles

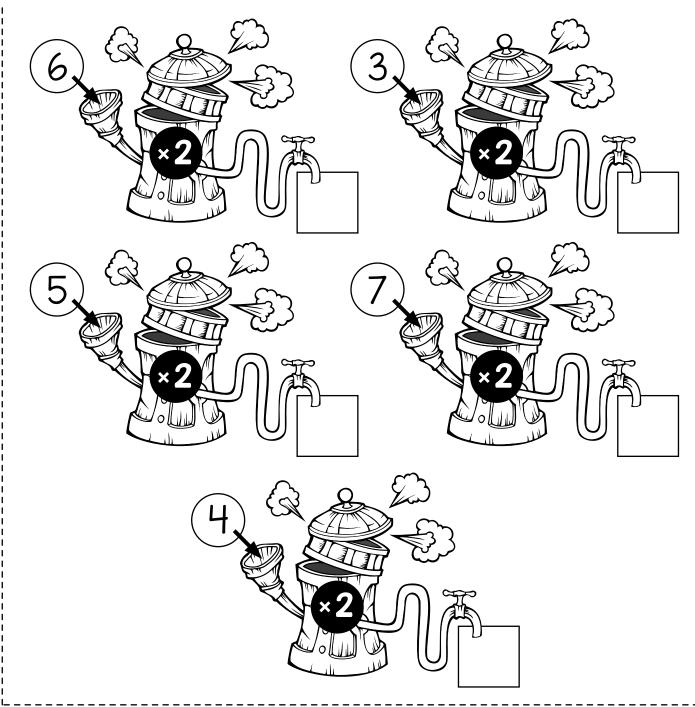
Write the missing numbers.



16



Write the answers.



Double marbles problem

Doubles

Read.

Ruby has 2 marbles. Dizzy has double the number of marbles as Ruby. Doc has double the number of marbles as Dizzy. Mango has double the number of marbles as Doc.

How many marbles do they each have?

- **2** <u>Underline</u> the question. **3** Circle the facts.
- 4 How can you solve it?

5 How many marbles do they each have?

Ruby ____ Dizzy ___ Doc ___ Mango ____

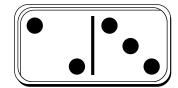
6 Who has the most marbles? _____

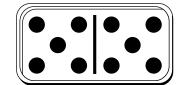
7 Check with a partner. Tell each other which strategy you used to solve the problem.

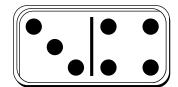
Near doubles

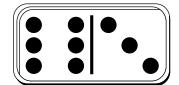
Doubles

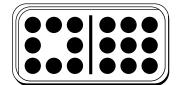
Color the near doubles dominoes.

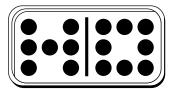












2 Match each sum to its nearest double.

$$9 + 10 =$$

$$3+3$$

$$3 + 4 =$$

3 Complete.

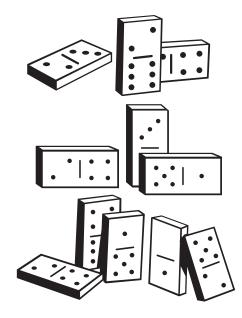
$$2 + 3 = 2 + 2 + 1$$

$$4+5 = 4+4+1$$

$$7 + 8$$

$$9 + 10$$

$$9+10 = 9+9+1$$



Adding near doubles

Doubles

Add Ruby's near double dice rolls.





















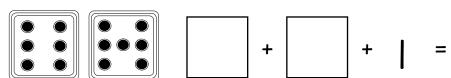






























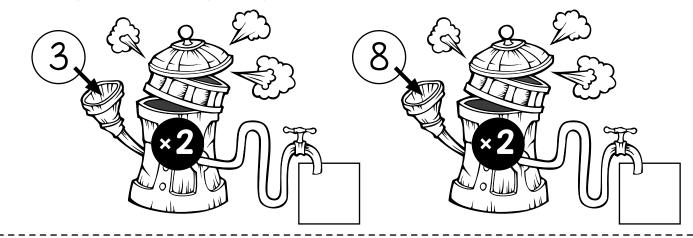




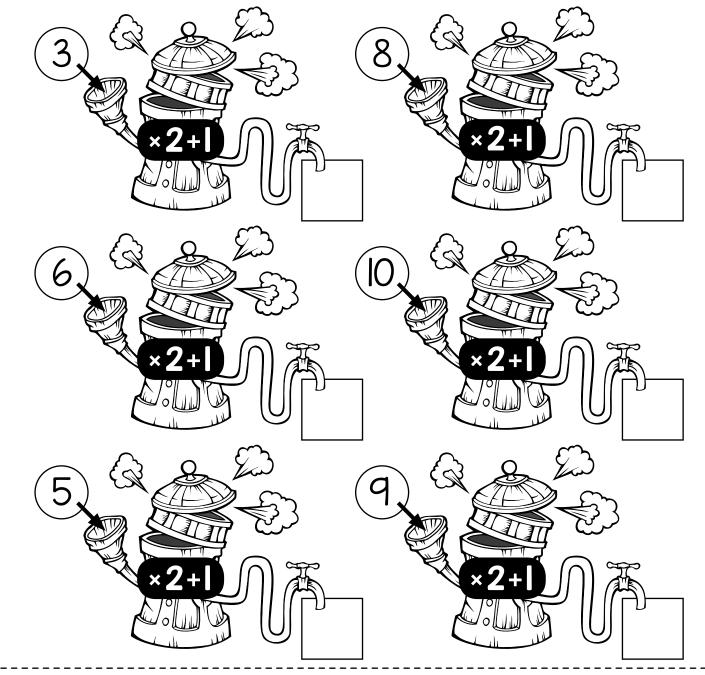
Near doubling

Doubles

What comes out of the doubles machine?



2 What comes out of the near doubles machine?

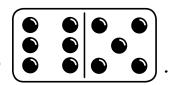


Domino dots problem

Doubles

Read.

Doc picked this domino



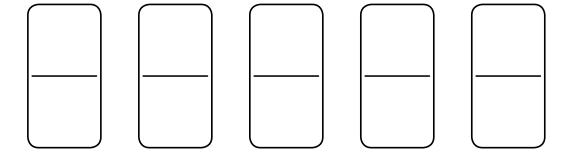
He looked at the dots and quickly found the total. How did Doc find the answer?



- Underline the questions. 3 Circle the facts.
- Use a <u>near doubles strategy</u> to solve the problem. Show your working.

There are _____ dots altogether.

- Compare your answer with a partner's. Is the answer the same if you used a different double?
- Make these into a different near doubles domino.



Swap with your partner. How quickly can you find all five totals?

Count to subtract

Subtract within 10

Use your hand to cover up. Write the answer.

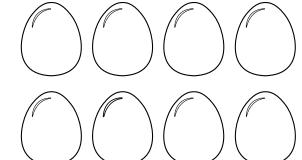
Cover 5 eggs.

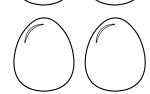
How many left?



Cover 3 pots. How many left?





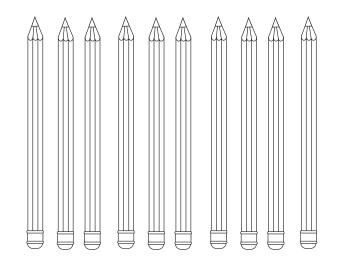




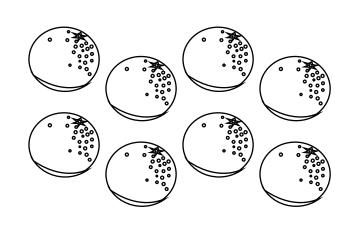




Cover 4 pencils.



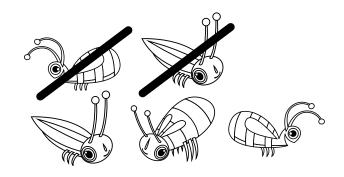
Cover I orange.

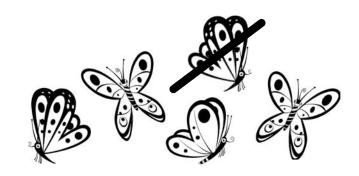


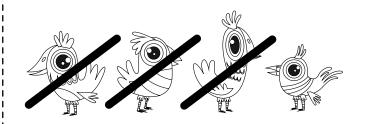
Take away

Subtract within 10

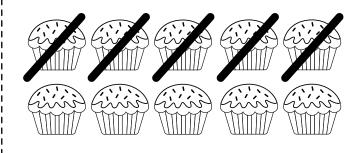
Find the answers.

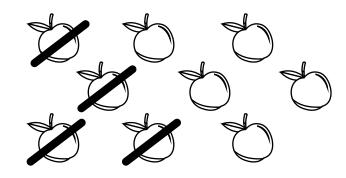












Number sentences

Subtract within 10

Fill in the number sentences.

Take away I.

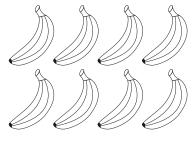






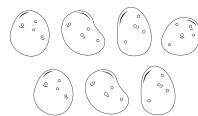


Take away 2.





Take away 3.



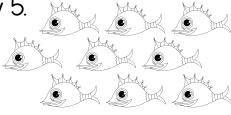


Take away 4.





Take away 5.

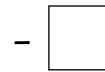




Take away 6.

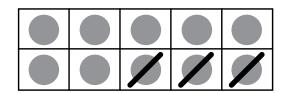






Subtract

I Write the sums.



2 Draw.



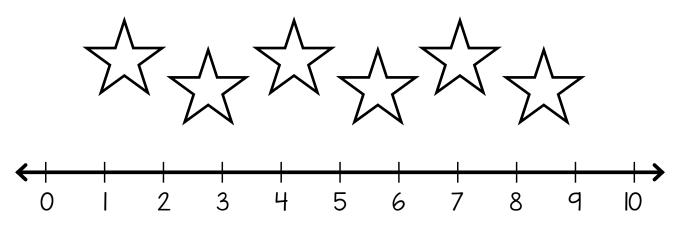
Take away 3.



Take away 2.

Count back

How many? Circle the number.

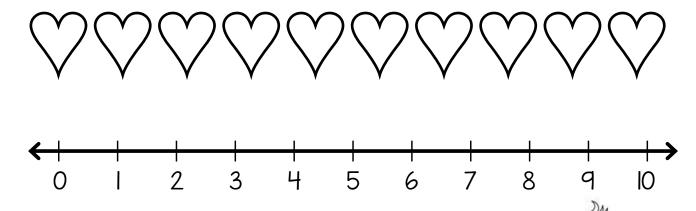


Cross out 3.

Jump back to show how many are left.

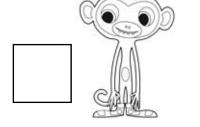


2 How many? Circle the number.



Cross out 5.

Jump back to show how many are left.



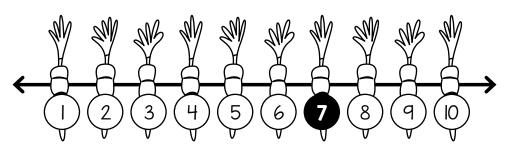
3 Write a number sentence for each take away above.

|--|

Number line subtraction

Subtract within 10

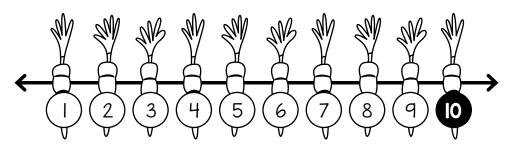
Hop back 3 places.



The number



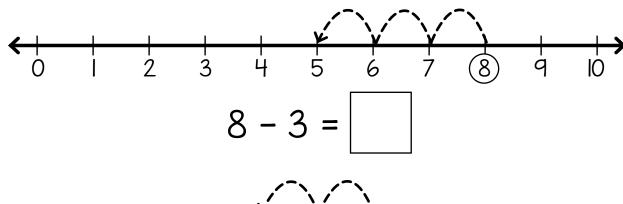
Hop back 8 places.

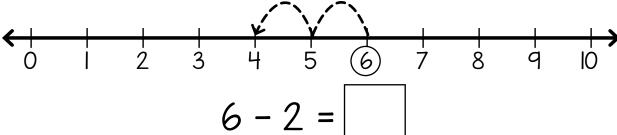


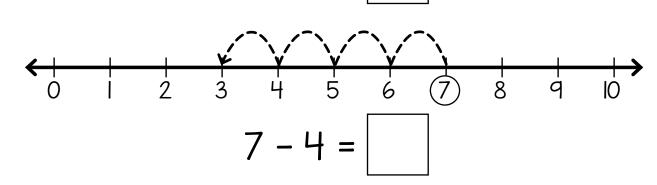
The number



2 Trace the hops. Answer the sums.

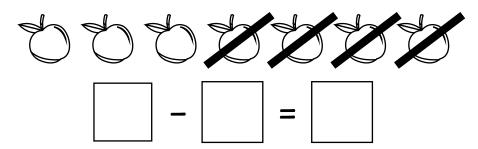


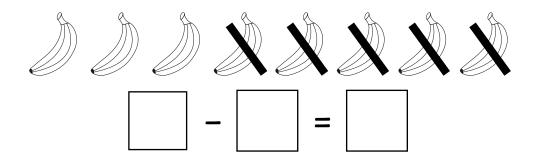


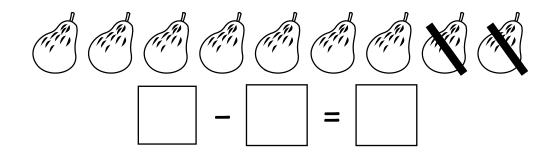


Take away

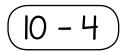
I Fill in the equations.

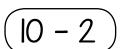






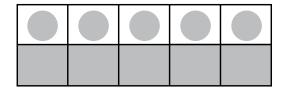
2 Match each sum to its answer.

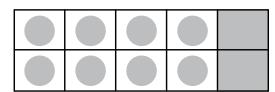








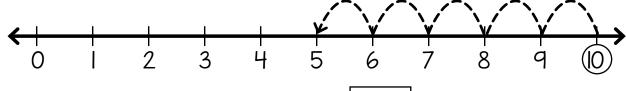


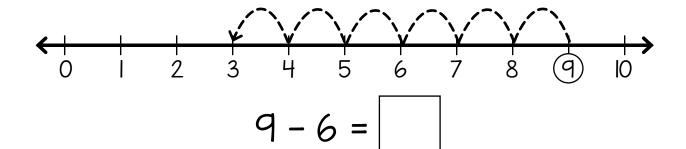




Number lines

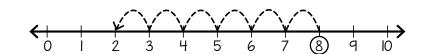
Count back.





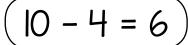
2 Match each sum to its number line.

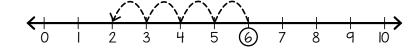
$$(7 - 3 = 4)$$



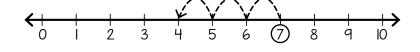
$$(5-2=3)$$

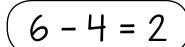


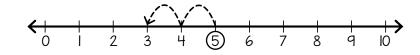












Carrots problem

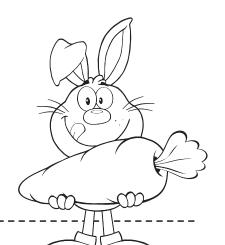
Subtract within 10

Read.

Snowy the rabbit dug up 8 carrots.

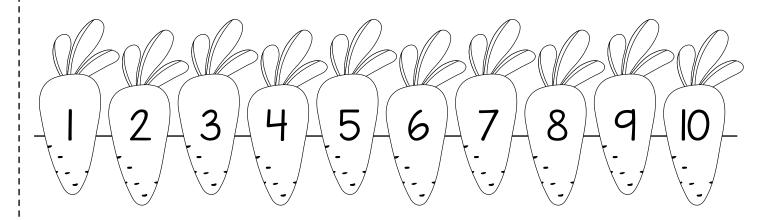
He ate 3.

How many carrots are left?



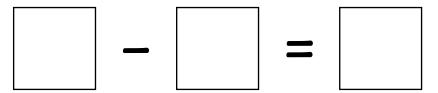
2 <u>Underline</u> the question. 3 Circle the facts.

4 Complete the number line to take away.



5 How many carrots are left? _____

6 Write it as a number sentence.



7 How do you know your answer is right?

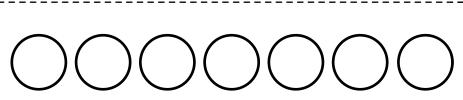
Count the difference

Subtract within 10

Count to find the difference.



The difference between 6 and 4 is





The difference between 7 and 3 is

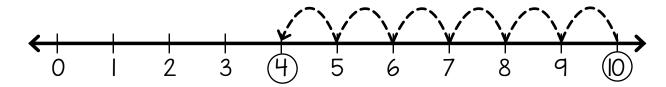






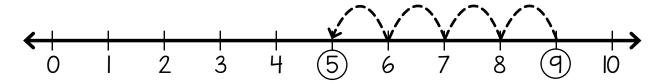
Difference on a number line (Subtract within 10)

Count the jumps to find the difference.



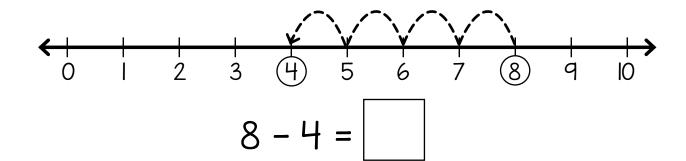
The difference between 10 and 4 is

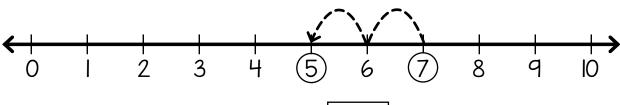




The difference between 9 and 5 is

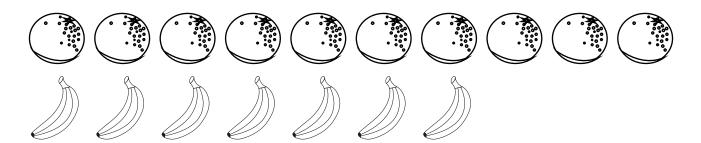




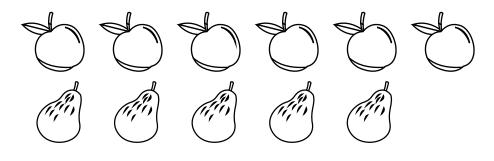


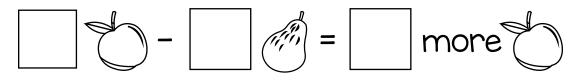
Write the number sentence (Subtract within 10)

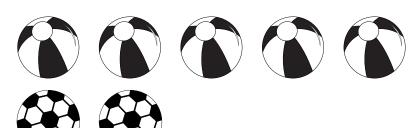
How many more?



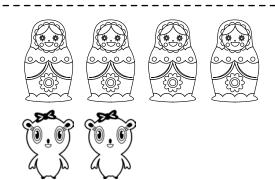
more

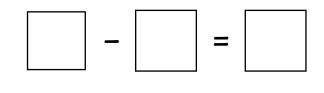












Difference problems

Draw the problems and find the answers.

Mango has 10 pink marbles. Dizzy has 8 blue marbles. How many more pink marbles are there?

There are ____ more pink marbles.



2 Ruby has 9 green bows. Doc has 3 red bows. How many more green bows are there?

There are more green bows.

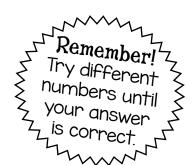


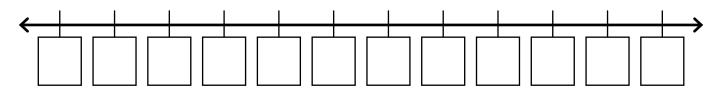
Find the difference problem (Subtract within 10)

Read

The difference between Doc's two numbers is 4. What could his numbers be?

- <u>Underline</u> the question. **3** Circle the facts.
- Have a guess! ____ and ____
- Now check using a number line. Count to find the difference.



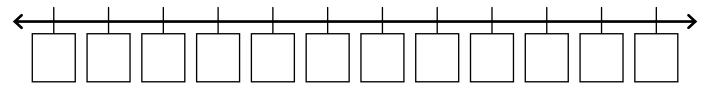


Doc's numbers could be _____ and ____.

Or _____ and ____. Or ____ and ____.

Or _____ and ____. Or ____ and ____.

Fill this number line with different numbers.



Doc's numbers could be _____ and ____.

Or _____ and ____ Or ___ and ____

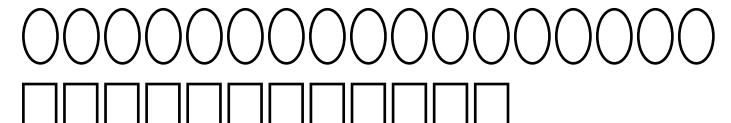
Compare your answers with a partner.

Are your answers the same?

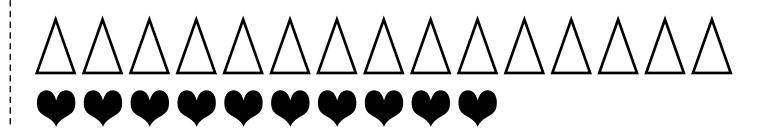
Count the difference

Subtract within 20

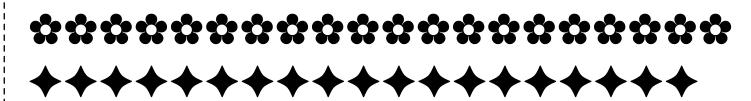
What is the difference?

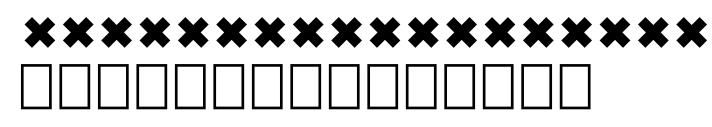


The difference between 17 and 12 is



The difference between 15 and 10 is

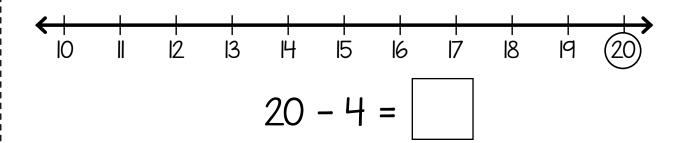


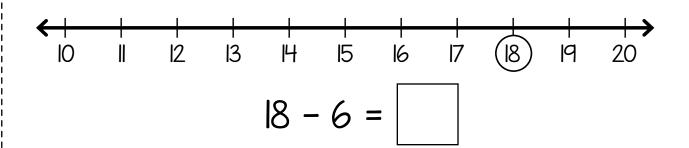


Number line difference

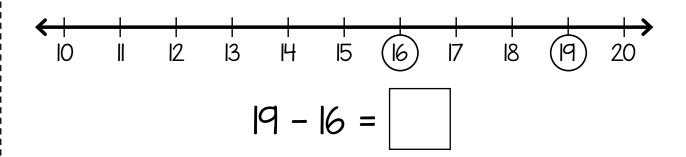
Subtract within 20

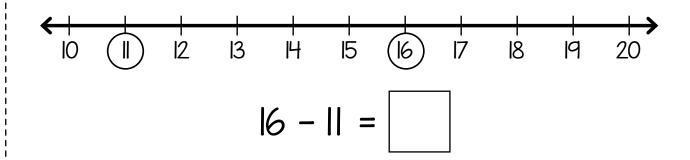
I Jump back to find the difference.





2 Count the spaces to find the difference.

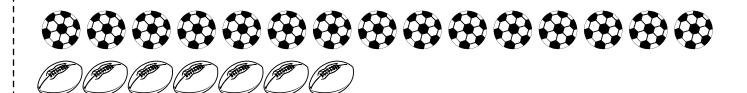


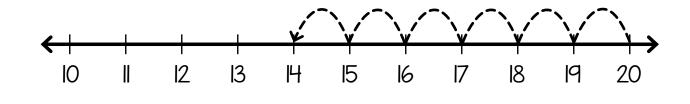


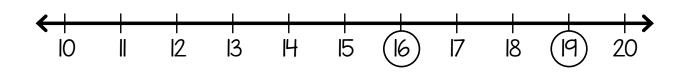
Write the number sentence (Subtract within 20)

Write the number sentence and find the difference.







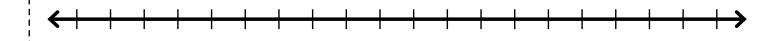


Difference problems

Subtract within 20

Use the number line to find the difference and fill in the sum.

Mango has 17 apples. Ruby has 8 pears. What is the difference?





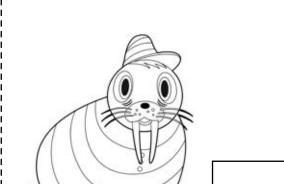








Waldo has 19 carrots. Doc has 5 beans. What is the difference?











Subtract unknown numbers (Subtract within 20)

Take away the answer to find the missing number. The first one is done for you.

0	0	0	0	0
0	0	0	Þ	ф

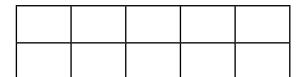
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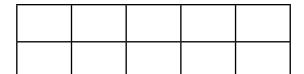
0	0	0	0	0
0	0	0	0	0

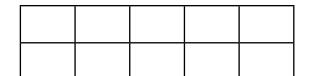
0	0	0	0	0
0	0	0	0	0







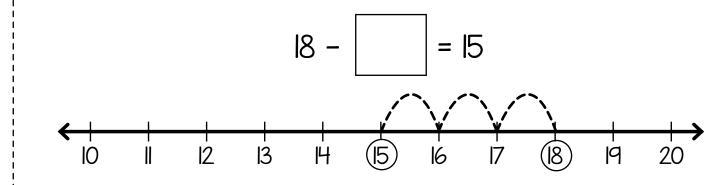




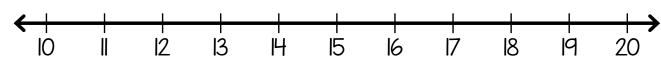
Count the difference

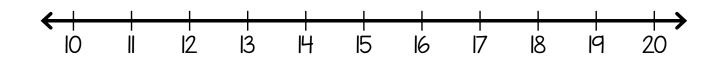
í Subtract within 20 ì

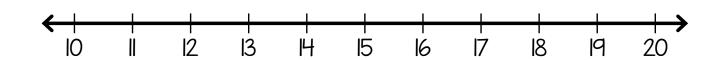
Circle the numbers and then count the difference.







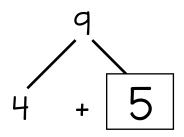


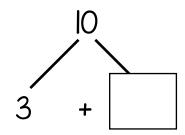


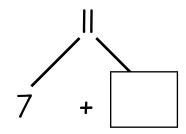
42

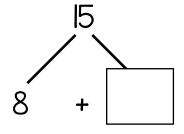
Number mountain

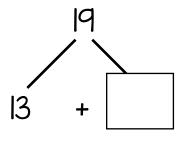
Make a number mountain. The first one is done for you.











Unknown number problems (Subtract within 20

Write a sum and find the answer.

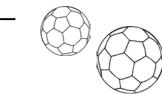
Ruby went shopping with 16 bags. She came home with II. How many bags did she lose?



Waldo took 13 fish cakes to the picnic. He ate some on the way and now has 7 left. How many did he eat?



Mango put 18 balls in a bag. It had a hole and now only 7 balls are in the bag. How many fell out?



4 Doc had 20 books. He gave some to his friends and now he has 14 left. How many did he give away?



Apples and pears problem (Subtract within 20

Read.

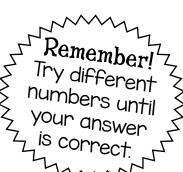
Mango has some apples. Ruby has some pears. The difference in number is 6. How many apples and how many pears are there?

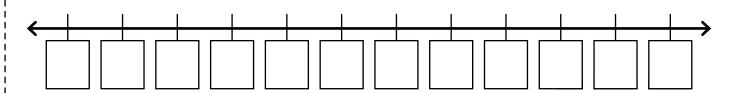


Have a guess!

___ apples and ____ pears

Now check using a number line.

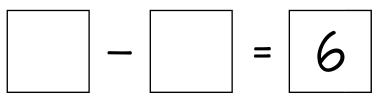




There could be _____ apples and ____ pears.



6 Write it as a number sentence.





Are there any other answers to this problem? Share with a partner. Did you get different answers? Talk about why.