
$$5 \times 7 = 35$$
$$20 + 2 = 22$$

Adding and Subtracting



Common core icons



This icon indicates a slide where the Standards for Mathematical Practice are being developed. Details of these are given in the Notes field.



Slides containing examples of mathematical modeling are marked with this stamp.



This icon indicates an opportunity for discussion or group work.

The **Standards for Mathematical Practice** outlined in the Common Core State Standards for Mathematics describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

These are:

- 1) Make sense of problems and persevere in solving them.**
- 2) Reason abstractly and quantitatively.**
- 3) Construct viable arguments and critique the reasoning of others.**
- 4) Model with mathematics.**
- 5) Use appropriate tools strategically.**
- 6) Attend to precision.**
- 7) Look for and make use of structure.**
- 8) Look for and express regularity in repeated reasoning.**



This icon indicates that the slide contains activities created in Flash. These activities are not editable.



This icon indicates teacher's notes in the Notes field.

Let's see how much you remember about
addition and **subtraction**!

Help Mr. Bumblebee find the
correct answers to these addition
and subtraction problems.

Press **start** to begin.

start





Mr. Bumblebee's first problem was $5 + 3 = 8$. How many number sentences can you make using 5, 3 and 8?

$$5 + 3 = 8$$

$$8 - 5 = 3$$

$$3 + 5 = 8$$

$$8 - 3 = 5$$

By rearranging the numbers in one sentence, you can make four different sentences.

So every time you learn **one** number sentence, you are really learning **four**.





Can you make four different
number sentences out of
these numbers?

Press **start** to begin.

start



Subtract by adding!

Sometimes, we can make a **subtraction** problem easier by thinking about **addition**.

$$20 - 18 = ?$$

We can turn this into an addition problem:

$$18 + 2 = 20$$

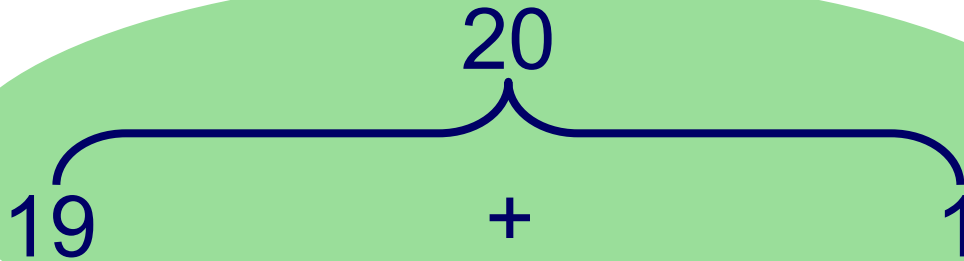
Now we can solve the problem by finding the number that makes 20 when added to 18.

Try it yourself! How could you solve this problem: $17 - 14 = ?$



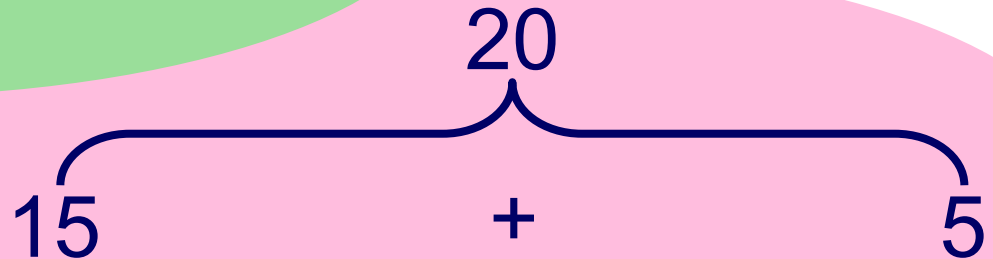
Decomposing numbers

Numbers can be broken up in different ways.



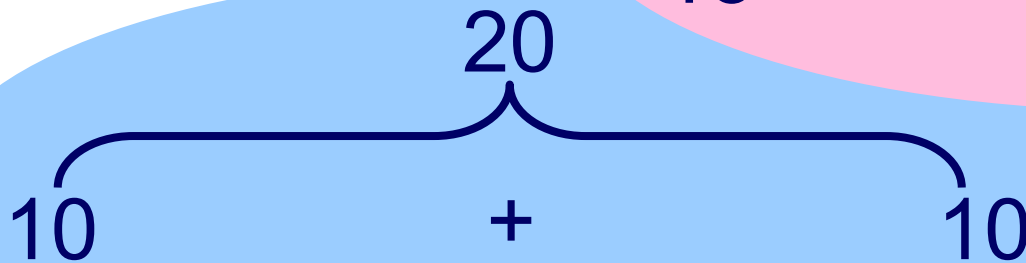
A green oval containing the number 20 at the top. A horizontal line with a downward-facing hook at its center spans the width of the oval. From the left end of this line, a curved line goes down to the number 19. From the right end, a curved line goes down to the number 1. A plus sign (+) is positioned in the center below the horizontal line.

$$20 = 19 + 1$$



A pink oval containing the number 20 at the top. A horizontal line with a downward-facing hook at its center spans the width of the oval. From the left end of this line, a curved line goes down to the number 15. From the right end, a curved line goes down to the number 5. A plus sign (+) is positioned in the center below the horizontal line.

$$20 = 15 + 5$$



A blue oval containing the number 20 at the top. A horizontal line with a downward-facing hook at its center spans the width of the oval. From the left end of this line, a curved line goes down to the number 10. From the right end, a curved line goes down to the number 10. A plus sign (+) is positioned in the center below the horizontal line.

$$20 = 10 + 10$$

Can you think of any other ways of making 20?



We can break numbers up to help us with addition and subtraction problems.

$$5 + 6 = ?$$

We can break this problem apart like this:

$$5 + 5 + 1 = 11$$

Now it's easier to solve!



Try it yourself! How could you make this problem easier: $8 + 4 = ?$





Making ten

Sometimes, we can make a problem easier by thinking about the number **10**.





Can you use **making ten** to complete these number sentences?

See if you can guess each step before pressing the **yellow cards** to reveal the answer.

Press **start** to begin.

start





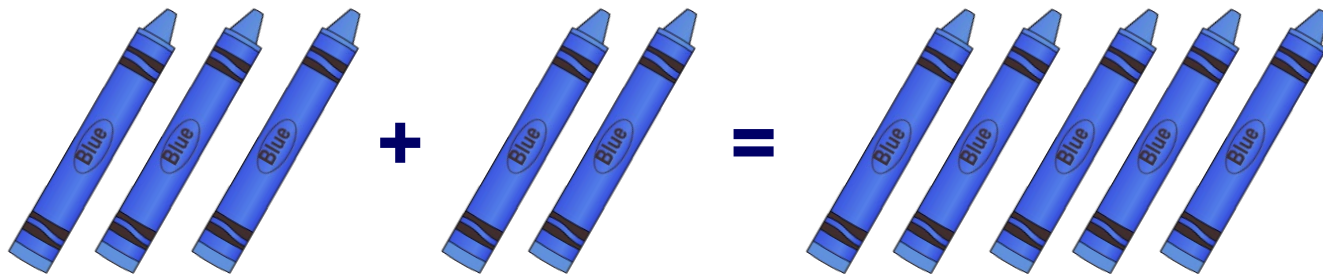
What does the equal sign (=) mean?



I think the equal sign means that numbers on opposite sides have the same value.

Let's test out Nicole's idea!

$$3 + 2 = 5$$



Do you agree with Nicole?



Are these number sentences
true or **false**?

Drag the number sentences
into the correct box.

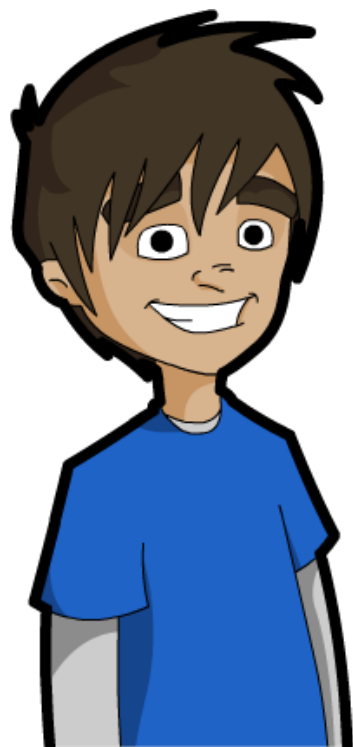
Press **start** to begin.

start





Alex has written some questions for his friends to solve.
Can you find the answer to Alex's questions?



$$8 + 6 = ?$$

$$13 - 6 - 4 = ?$$

$$13 - 4 = ?$$

$$5 - 3 = ?$$

$$6 + 7 + 2 = ?$$

$$9 + 7 = ?$$





Addition and subtraction problems

Bernard is 3 years old. Spot is 4 years older than Bernard. How old is Spot?

