

# SUBTRACTION WITHIN 20

## A WHAT IS SUBTRACTION?

### Definition Subtraction

**Subtraction** means taking an amount away from a group to find out what is left. This result is called the **difference**.

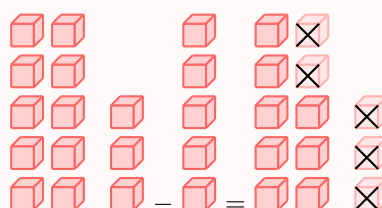
- The **minus sign** ( $-$ ) tells us to subtract.
- The **equals sign** ( $=$ ) shows that both sides have the same value.

We can show "thirteen minus five equals eight" in different ways:

- **With number:**

$$13 - 5 = 8$$

- **With cubes:**



- **With part-whole model:**



### Method Subtracting by Counting Back

A great way to subtract is by "**Counting Back**." You start with the first number and then count backward.

**Let's solve:**  $13 - 5 = ?$

- **Step 1: Start with the first number.** Keep the number **13 in your head** and say it out loud: "Thirteen."
- **Step 2: Get your fingers ready.** The second number, **5**, tells you how many steps to count back. Hold up **5 fingers** to keep track of your steps.



- **Step 3: Count back from 13.** Now, put down one finger for each number you say as you count backward: "Twelve, eleven, ten, nine, eight!"
  - Say "Twelve" → Put down 1st finger.
  - Say "Eleven" → Put down 2nd finger.
  - Say "Ten" → Put down 3rd finger.
  - Say "Nine" → Put down 4th finger.
  - Say "Eight!" → Put down 5th finger.

The last number you said is the answer.

$$13 - 5 = 8$$

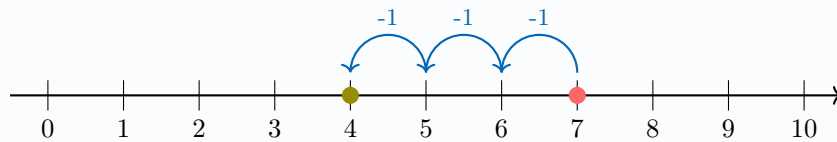
## B SUBTRACTING ON THE NUMBER LINE

### Method Using a Number Line to Subtract

We can also use a number line to subtract. Subtraction is like taking steps backward on a path.

**Let's solve:**  $7 - 3$

1. **Start at the first number.** Find the number **7** on the number line. This is your starting point.
2. **Jump backward.** The second number, **3**, tells you how many jumps to make. Since we are subtracting, we move to the left, where the numbers get smaller. Make 3 jumps backward.
3. **Find your landing spot.** The number you land on is the answer.



After 3 jumps backward, you land on 4. So,  $7 - 3 = 4$ .

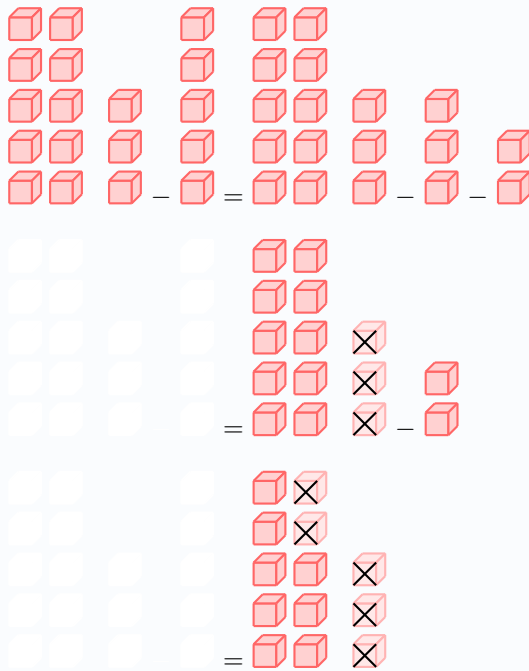
## C THE "SUBTRACT TO MAKE 10" STRATEGY

## Method Subtracting by Making a Ten

The "Make a Ten" strategy is a powerful way to subtract. We break the subtraction into two smaller, easier steps: first, we jump back to 10, and then we subtract the rest.

Let's solve:  $13 - 5$

1. **Start at the first number**, which is 13.
2. **Jump back to 10**. How many steps do we take to get from 13 to 10? We take **3 steps back**.
3. **Figure out the rest**. We needed to subtract a total of 5. We already subtracted 3. How many more do we need to subtract? We can break 5 into 3 and 2 ( $5 = 3 + 2$ ). So, we still need to subtract **2** more.
4. **Take the final jump**. From 10, jump back 2 more steps. You land on 8!



By breaking 5 into 3 and 2, we can solve the problem easily:

$$\begin{aligned} 13 - 5 &= 13 - 3 - 2 \\ &= 10 - 2 \\ &= 8 \end{aligned}$$

So,  $13 - 5 = 8$ .