SUBTRACTION

A WHAT IS SUBTRACTION?
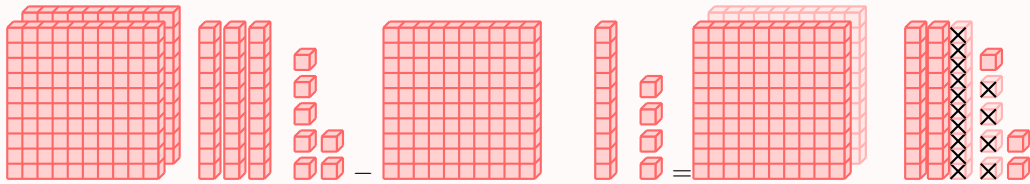
> **Definition Subtraction**
>
> **Subtraction** means taking an amount away from a group to find out what is left. This result is called the **difference**. The **minus sign (−)** tells us to subtract.
>
> We can show "two hundred thirty-seven minus one hundred fourteen equals one hundred twenty-three" in different ways:
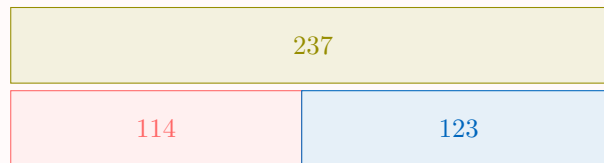>
> - **With Numbers**:
>
> $$237 - 114 = 123$$
>
> - **With Cubes**:
>
>
>
> - **With Column Subtraction**:
>
> $$\begin{array}{r} 2\ 3\ 7 \\ -\ 1\ 1\ 4 \\ \hline 1\ 2\ 3 \end{array}$$
>
> - **With a Part-Whole Model**:
>
>

B SUBTRACTION IN COLUMNS

> **Method Subtraction by Compensation**
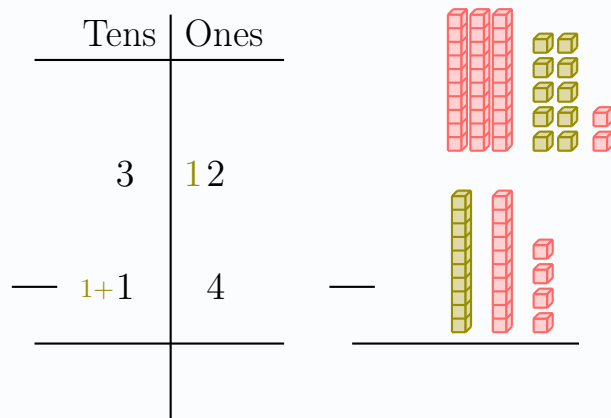>
> Let's calculate:
>
> $$32 - 14$$
>
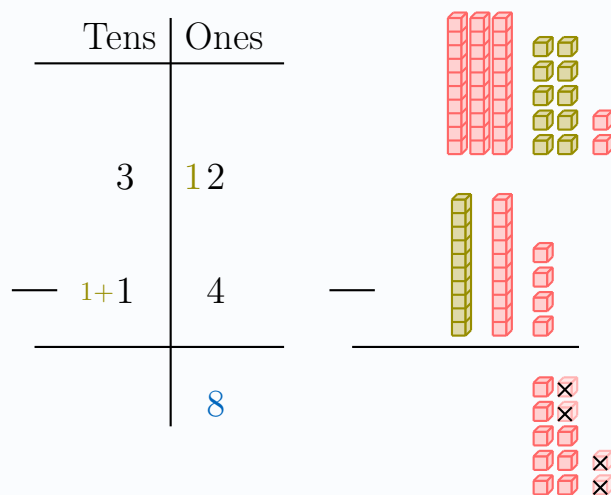> - **Step 1: Set up the subtraction.**
>
>
>
> - **Step 2: Check the ones place.** We need to do $2 - 4$, but we don't have enough ones.
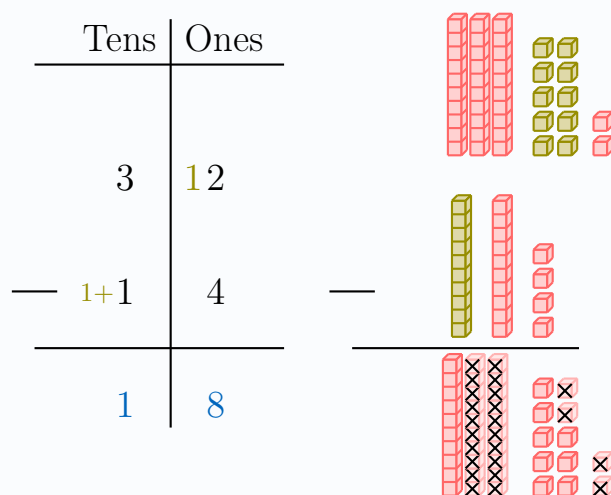> - **Step 3: Compensate.** Add 10 to both numbers (10 ones to the top; 1 ten to the bottom)
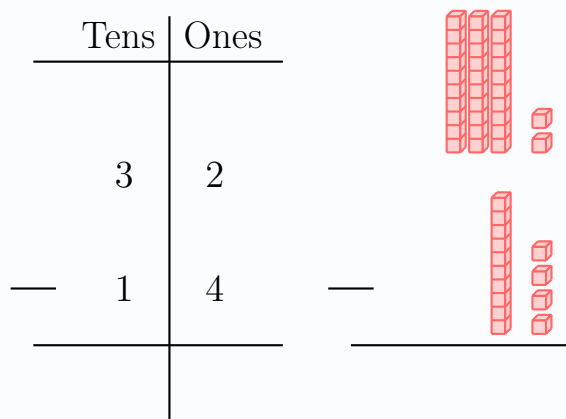
Tens	Ones
3	1 2
— 1+1	4

- **Step 4: Subtract the ones.** Now it's easy:

$$12 \text{ ones} - 4 \text{ ones} = 8 \text{ ones}$$

Tens	Ones
3	1 2
— 1+1	4
	8

- **Step 5: Subtract the tens.**

$$3 \text{ tens (from 32)} - 1 \text{ ten (from 14)} - 1 \text{ ten (compensated)} = 1 \text{ ten}$$

Tens	Ones
3	1 2
— 1+1	4
1	8

- **Result**: The difference is 1 ten and 8 ones. So,

$$32 - 14 = 18$$