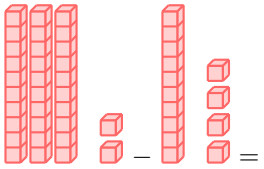
SUBTRACTION WITHIN 100

A DEFINITIONS

Discover: Have you ever given away some of your toys or candies to a friend? When you do that, you're subtracting! Let's see: if you have 32 cubes, and you give 14 cubes to your friend, how many cubes do you have left?

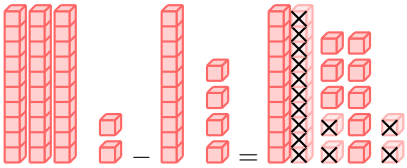


Answer: Counting each cube individually would be quite cumbersome, especially with larger numbers. In such cases, column subtraction is a more efficient method.

	Tens	Ones
	2	12
	~~3~~	~~2~~
−	1	4
	1	8

Now you have 18 cubes left!

$$32 - 14 = 18$$



Definition **Subtraction**

Subtraction means taking something away. When we subtract, we find out how many are left.

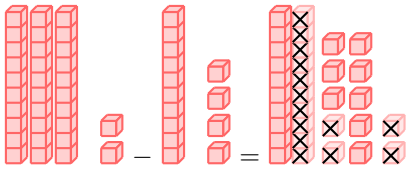
- The $-$ symbol means "subtract."
- The $=$ symbol shows that the two sides are the same.

We can represent subtraction as:

- **Numbers**:

$$32 - 14 = 18$$

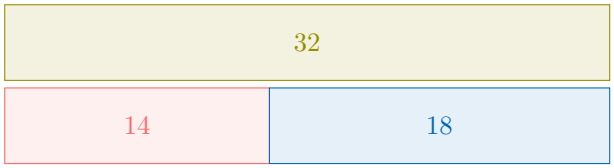
- **Cubes**:



- **Words**:

thirty-two minus fourteen equals eighteen

- **Part whole model**:

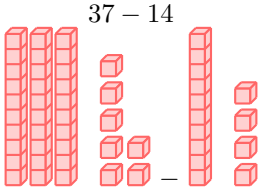


B SUBTRACTING ONES THEN ADDING TENS

Method **Subtracting Ones Then Tens Using Cubes**

To calculate:

$$37 - 14$$



- **Step 1: Subtract the ones**

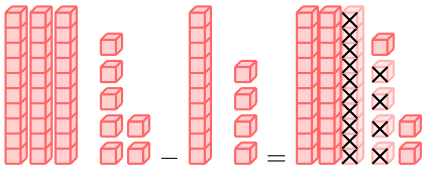
$$7 \text{ ones} - 4 \text{ ones} = 3 \text{ ones}$$

- **Step 2: Subtract the tens**

$$3 \text{ tens} - 1 \text{ ten} = 2 \text{ tens}$$

- **Result**: There are 2 tens and 3 ones. So,

$$37 - 14 = 23$$



Let's work on $32 - 14$. When we try to subtract the ones,

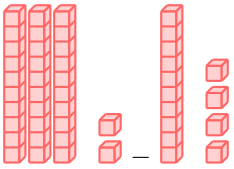
$$2 \text{ ones} - 4 \text{ ones}$$

we don't have enough ones in 32. So, we'll borrow 1 ten from the tens place and turn it into 10 ones. Now we have enough ones to finish the subtraction. Let's see how it's done!

Method **Subtracting Ones Then Tens with Regrouping**

To calculate:

$$32 - 14$$

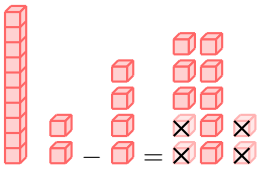


- **Step 1: Subtract the ones with regrouping**

$$2 \text{ ones} - 4 \text{ ones}$$

We don't have enough ones, so we borrow 1 ten from the tens place, turning it into 10 ones. Now we have 12 ones.

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

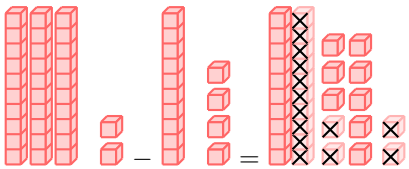


- **Step 2: Subtract the tens**

$$3 \text{ tens of } 32 - 1 \text{ ten of } 14 - 1 \text{ ten of borrowing} = 1 \text{ ten}$$

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

$$32 - 14 = 18$$



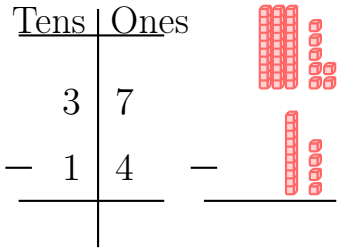
C SUBTRACTION USING COLUMNS

Method **Subtraction in Columns**

To calculate:

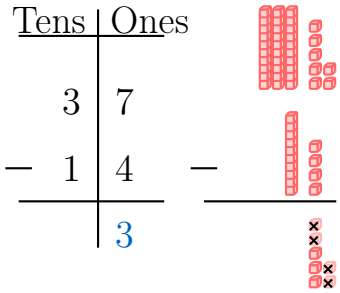
$$37 - 14$$

- **Step 1: Set up the subtraction**
  Write the numbers in a vertical column, making sure the digits line up by place value (ones under ones, tens under tens).



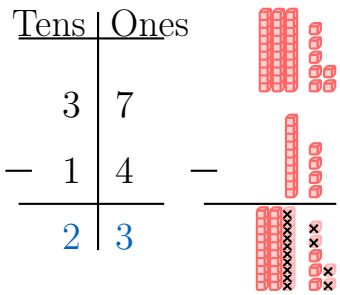
- **Step 2: Subtract the ones**

$$7 \text{ ones} - 4 \text{ ones} = 3 \text{ ones}$$



- **Step 3: Subtract the tens**

$$3 \text{ tens} - 1 \text{ ten} = 2 \text{ tens}$$



- **Result**: There are 2 tens and 3 ones. So,

$$37 - 14 = 23$$

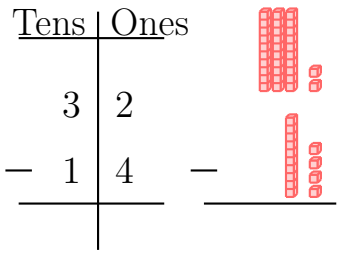
Method **Column Subtraction with Borrowing**

To calculate:

$$32 - 14$$

- **Step 1: Set up the subtraction**
  Write the numbers in a vertical column, making sure the digits line up by place value (ones under ones, tens

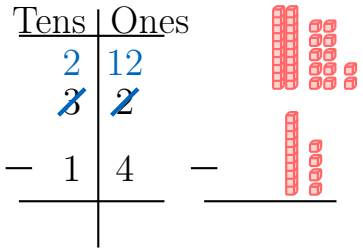
under tens).



- **Step 2: Regroup 1 Ten**

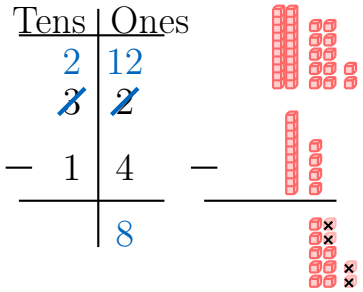
$$2 \text{ ones} - 4 \text{ ones}$$

We don't have enough ones, so we borrow 1 ten from the tens place, turning it into 10 ones. Now we have 12 ones.



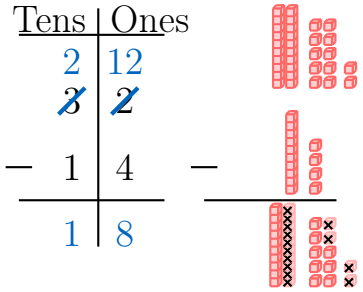
- **Step 3: Subtract the ones**

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



- **Step 4: Subtract the tens**

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



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

$$32 - 14 = 18$$