

SUBTRACTION WITHIN 100

A DEFINITIONS

Definition Subtraction

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

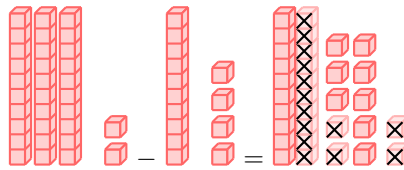
- The $-$ symbol means "subtract."
- The $=$ symbol shows that the two sides are the same.

We can represent subtraction as:

- **Numbers:**

$$32 - 14 = 18$$

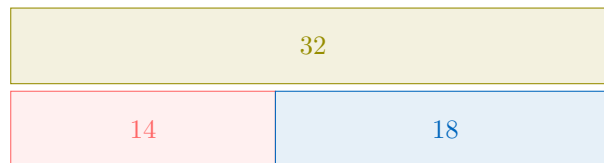
- **Cubes:**



- **Words:**

thirty-two minus fourteen equals eighteen

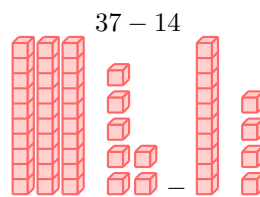
- **Part whole model:**



B SUBTRACTING ONES THEN ADDING TENS

Method Subtracting Ones Then Tens Using Cubes

To calculate:



- **Step 1: Subtract the ones**

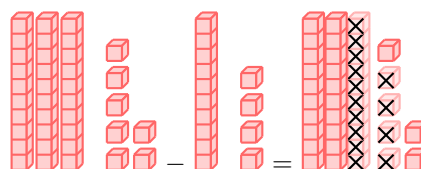
$$7 \text{ ones} - 4 \text{ ones} = 3 \text{ ones}$$

- **Step 2: Subtract the tens**

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

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

$$37 - 14 = 23$$



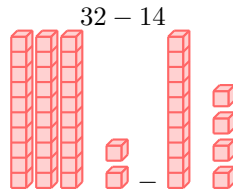
Let's work on $32 - 14$. When we try to subtract the ones,

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

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:

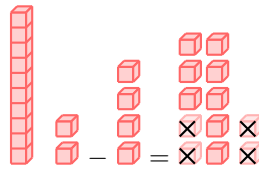


- **Step 1: Subtract the ones with regrouping**

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

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.

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

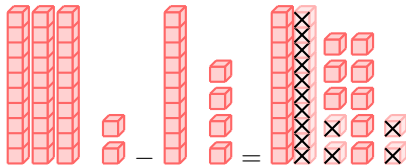


- **Step 2: Subtract the tens**

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

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

$$32 - 14 = 18$$



C SUBTRACTION USING COLUMNS

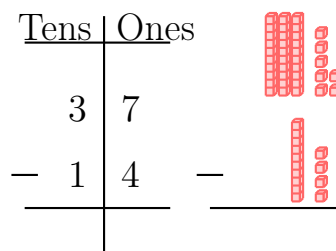
Method Subtraction in Columns

To calculate:

$$37 - 14$$

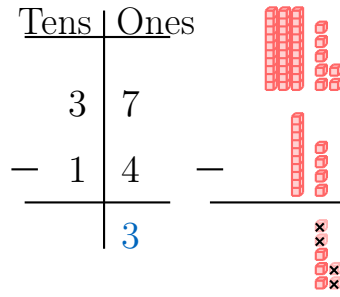
- **Step 1: Set up the subtraction**

Write the numbers in a vertical column, making sure the digits line up by place value (ones under ones, tens under tens).



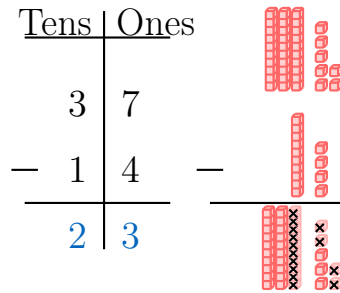
- **Step 2: Subtract the ones**

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



- **Step 3: Subtract the tens**

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



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

$$37 - 14 = 23$$

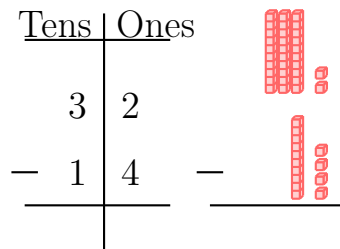
Method Column Subtraction with Borrowing

To calculate:

$$32 - 14$$

- **Step 1: Set up the subtraction**

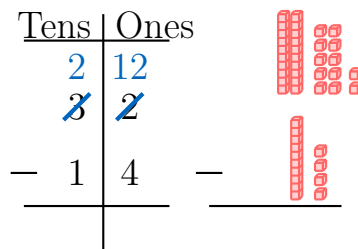
Write the numbers in a vertical column, making sure the digits line up by place value (ones under ones, tens under tens).



- **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**

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

Tens	Ones	
2	12	
2	12	
-	14	
-	8	

- **Step 4: Subtract the tens**

3 tens (from 32) – 1 ten (from 14) – 1 ten (borrowed) = 1 ten

Tens	Ones	
2	12	
2	12	
-	14	
1	8	

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

$$32 - 14 = 18$$