

SUBTRACTION WITHIN 100

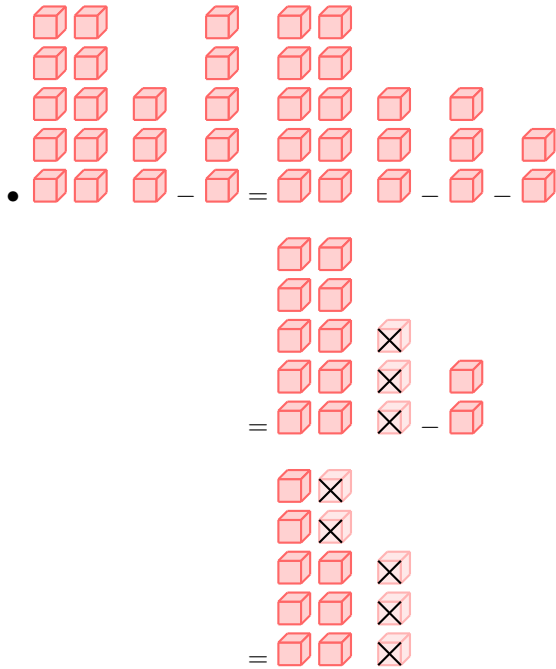
A WHAT IS SUBTRACTION?

A.1 SUBTRACTING WITHIN 20

Ex 1:

$$13 - 5 = \boxed{8}$$

Answer:

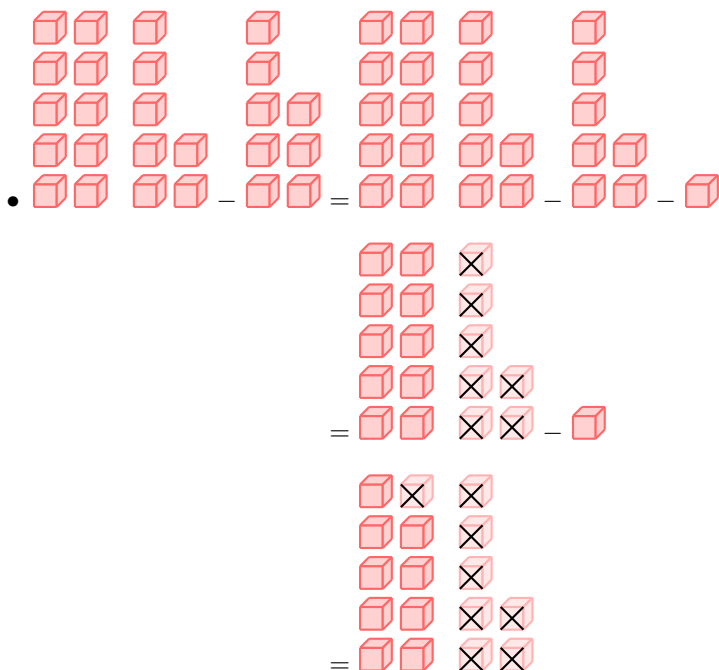


$$\begin{aligned} \bullet \quad 13 - 5 &= 13 - 3 - 2 \\ &= 10 - 2 \\ &= 8 \end{aligned}$$

Ex 2:

$$17 - 8 = \boxed{9}$$

Answer:

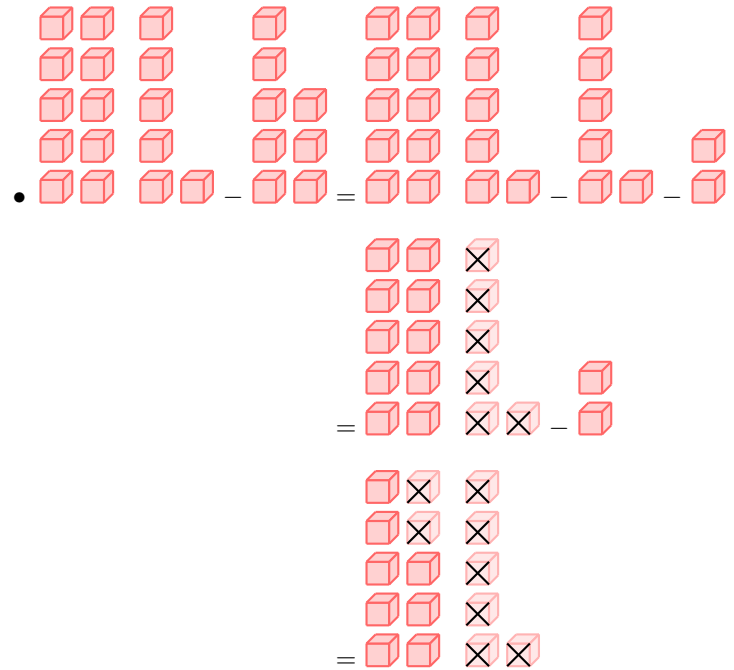


$$\begin{aligned} \bullet \quad 17 - 8 &= 17 - 7 - 1 \\ &= 10 - 1 \\ &= 9 \end{aligned}$$

Ex 3:

$$16 - 8 = \boxed{8}$$

Answer:

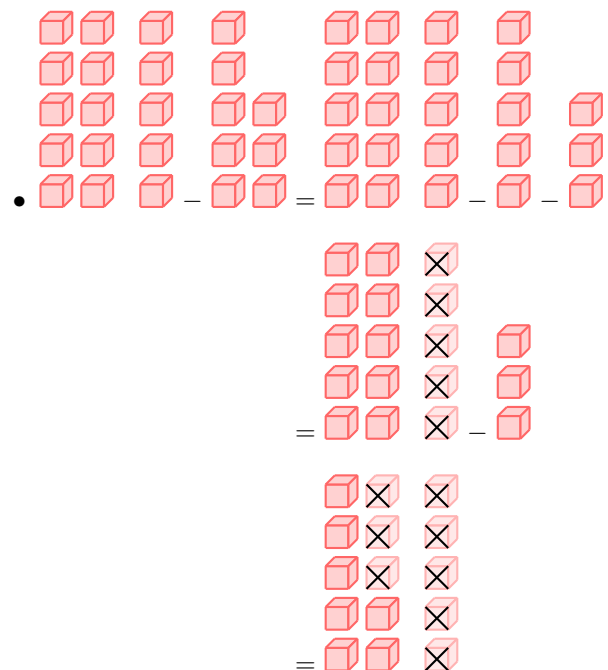


$$\begin{aligned} \bullet \quad 16 - 8 &= 16 - 6 - 2 \\ &= 10 - 2 \\ &= 8 \end{aligned}$$

Ex 4:

$$15 - 8 = \boxed{7}$$

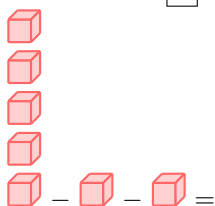
Answer:



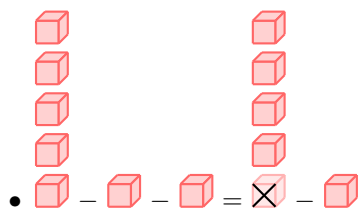
A.2 SUBTRACTING MULTIPLE NUMBERS

Ex 9:

$$5 - 1 - 1 = \boxed{3}$$



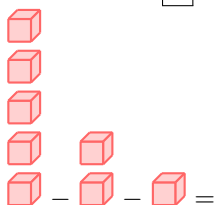
Answer:



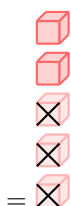
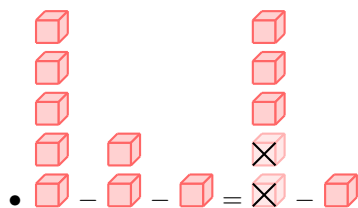
$$\bullet \quad 5 - 1 - 1 = 4 - 1 = 3$$

Ex 10:

$$5 - 2 - 1 = \boxed{2}$$



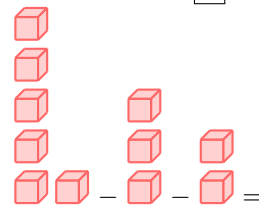
Answer:



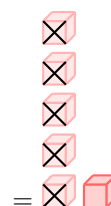
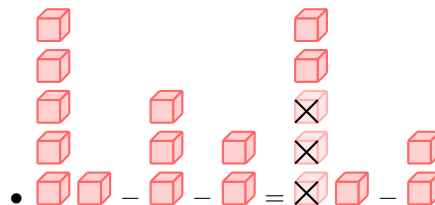
$$\bullet \quad 5 - 2 - 1 = 3 - 1 = 2$$

Ex 11:

$$6 - 3 - 2 = \boxed{1}$$



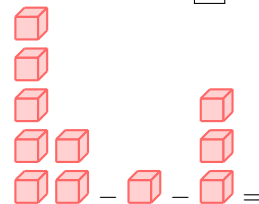
Answer:



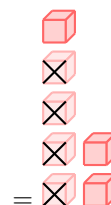
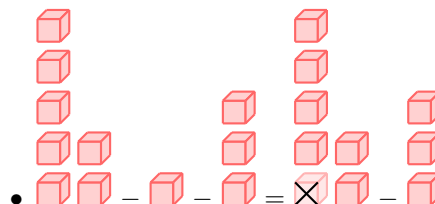
$$\bullet \quad 6 - 3 - 2 = 3 - 2 = 1$$

Ex 12:

$$7 - 1 - 3 = \boxed{3}$$



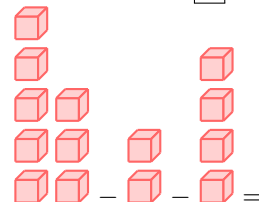
Answer:



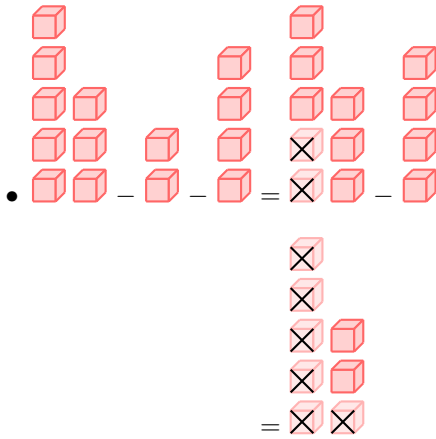
$$\bullet \quad 7 - 1 - 3 = 6 - 3 = 3$$

Ex 13:

$$8 - 2 - 4 = \boxed{2}$$

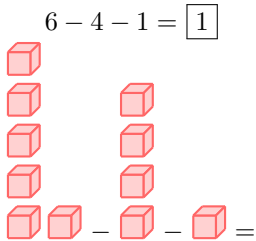


Answer:

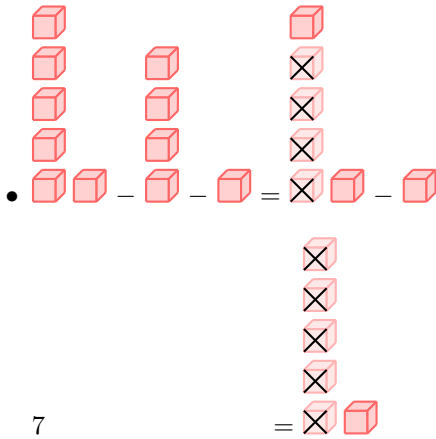


• $8 - 2 - 4 = 6 - 4$
 $= 2$

Ex 14:

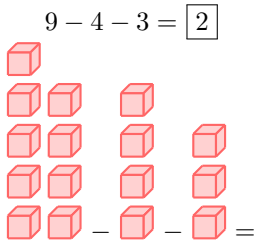


Answer:

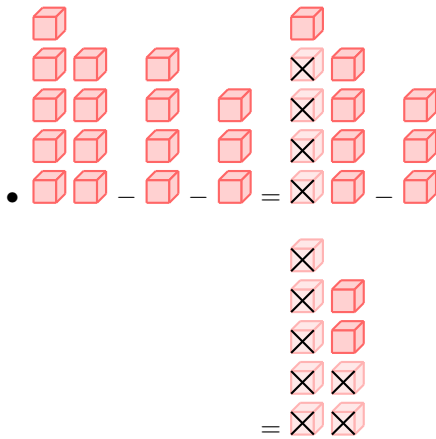


• $6 - 4 - 1 = 2 - 1$
 $= 1$

Ex 15:



Answer:



• $9 - 4 - 3 = 5 - 3$
 $= 2$

B SUBTRACTING ONES THEN TENS

B.1 SUBTRACTING WITHIN 100 WITHOUT REGROUPING IN TABLE

Ex 16: Calculate $25 - 12$:

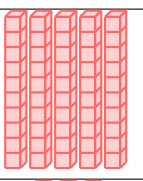
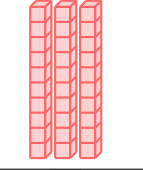
	Tens	Ones
-		
	1	3

Answer:

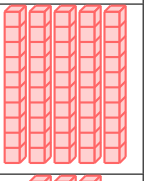
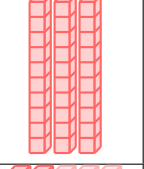
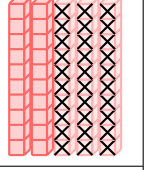
	Tens	Ones
-		
	1	3

• $25 - 12 = 13$

Ex 17: Calculate $55 - 32$:

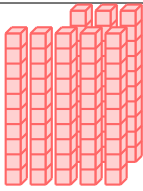
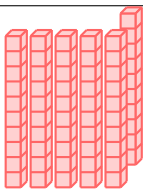
	Tens	Ones
		
—		
	2	3

Answer:

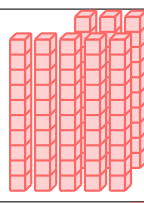
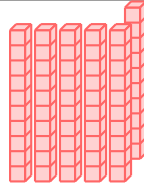
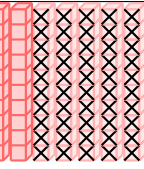
	Tens	Ones
		
—		
		
	2	3

• $55 - 32 = 23$

Ex 18: Calculate $87 - 62$:

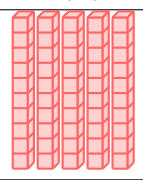
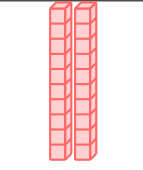
	Tens	Ones
		
—		
	2	5

Answer:

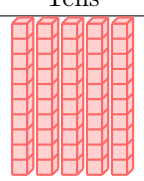
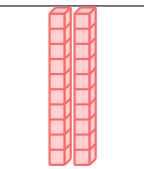
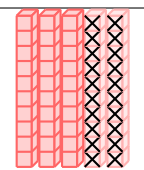
	Tens	Ones
		
—		
		
	2	5

• $87 - 62 = 25$

Ex 19: Calculate $57 - 27$:

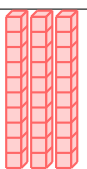
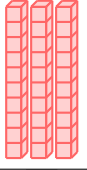
	Tens	Ones
		
—		
	3	0

Answer:

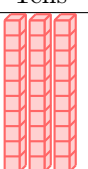
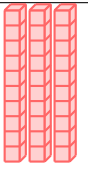
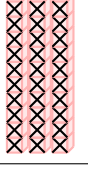
	Tens	Ones
		
—		
		
	3	0

• $57 - 27 = 30$

Ex 20: Calculate $36 - 35$:

	Tens	Ones
		
—		
	0	1

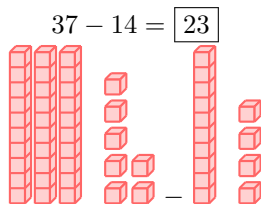
Answer:

	Tens	Ones
		
—		
		
	0	1

- $36 - 35 = 1$

B.2 SUBTRACTING WITHIN 100 WITHOUT REGROUPING

Ex 21:



Answer:

- **Step 1: Subtract the ones**

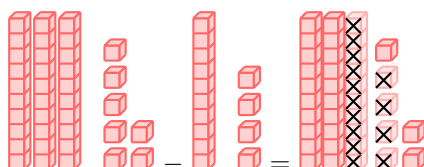
$$7 \text{ ones} - 4 \text{ ones} = 3 \text{ ones}$$

- **Step 2: Subtract the tens**

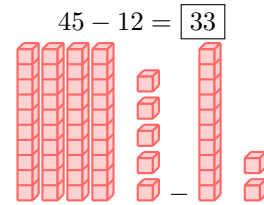
$$3 \text{ tens} - 1 \text{ ten} = 2 \text{ tens}$$

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

$$37 - 14 = 23$$



Ex 22:



Answer:

- **Step 1: Subtract the ones**

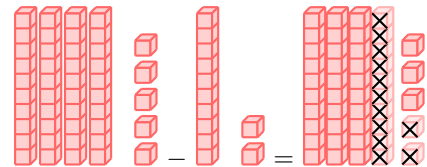
$$5 \text{ ones} - 2 \text{ ones} = 3 \text{ ones}$$

- **Step 2: Subtract the tens**

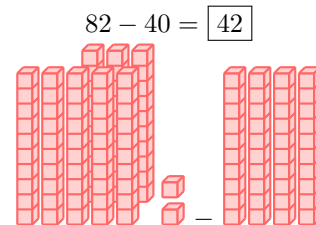
$$4 \text{ tens} - 1 \text{ ten} = 3 \text{ tens}$$

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

$$45 - 12 = 33$$



Ex 23:



Answer:

- **Step 1: Subtract the ones**

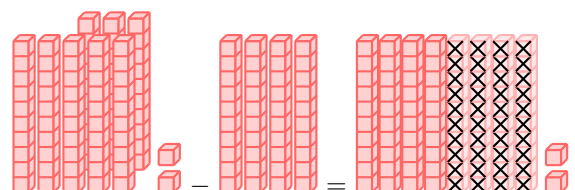
$$2 \text{ ones} - 0 \text{ ones} = 2 \text{ ones}$$

- **Step 2: Subtract the tens**

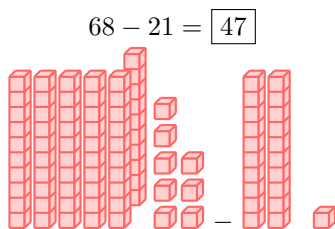
$$8 \text{ tens} - 4 \text{ tens} = 4 \text{ tens}$$

- **Result:** There are 4 tens and 2 ones. So,

$$82 - 40 = 42$$



Ex 24:



Answer:

- **Step 1: Subtract the ones**

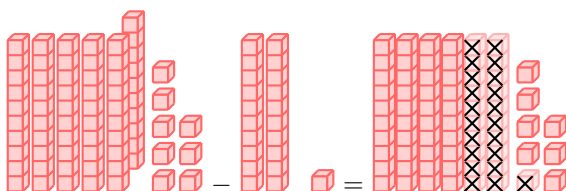
$$8 \text{ ones} - 1 \text{ one} = 7 \text{ ones}$$

- **Step 2: Subtract the tens**

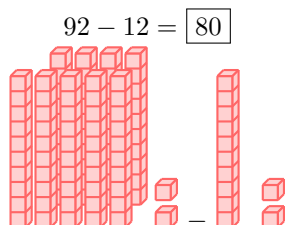
$$6 \text{ tens} - 2 \text{ tens} = 4 \text{ tens}$$

- **Result:** There are 4 tens and 7 ones. So,

$$68 - 21 = 47$$



Ex 25:



Answer:

- **Step 1: Subtract the ones**

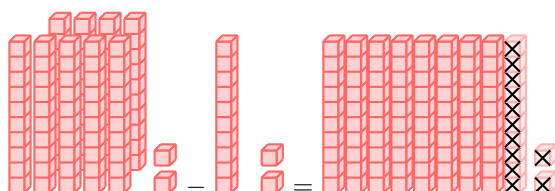
$$2 \text{ ones} - 2 \text{ ones} = 0 \text{ ones}$$

- **Step 2: Subtract the tens**

$$9 \text{ tens} - 1 \text{ ten} = 8 \text{ tens}$$

- **Result:** There are 8 tens and 0 ones. So,

$$92 - 12 = 80$$



B.3 SUBTRACTING WITHIN 100 WITH REGROUPING IN TABLE

Ex 26: Calculate $31 - 12$:

	Tens	Ones
-		
	1	9

Answer:

	Tens	Ones
-		

1 one - 2 ones, we don't have enough ones, so we borrow 1 ten from the tens place, turning it into 10 ones.

	Tens	Ones
-		

	Tens	Ones
•		
–		
	1	9

Ex 27: Calculate $53 - 25$:

	Tens	Ones
–		
	2	8

Answer:

	Tens	Ones
•		
–		

Since $3 - 5$ in the ones place isn't possible, we borrow 1 ten from the tens place, making it 13 ones.

	Tens	Ones
•		
–		

	Tens	Ones
•		
–		
	2	8

Ex 28: Calculate $54 - 38$:

	Tens	Ones
–		
	1	6

Answer:

	Tens	Ones
•		
–		

Since $4 - 8$ in the ones place isn't possible, we borrow 1 ten from the tens place, making it 14 ones.

	Tens	Ones
•		
–		

	Tens	Ones
•		
–		
	1	6

Ex 29: Calculate $61 - 36$:

	Tens	Ones
•		
–		
	2	5

Answer:

	Tens	Ones
•		
–		

Since $1 - 6$ in the ones place isn't possible, we borrow 1 ten from the tens place, making it 11 ones.

	Tens	Ones
•		
–		

	Tens	Ones
•		
–		
	2	5

Ex 30: Calculate $81 - 45$:

	Tens	Ones
•		
–		
	3	6

Answer:

	Tens	Ones
•		
–		

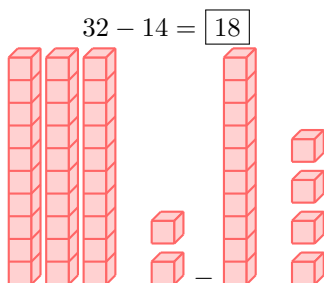
Since $1 - 5$ in the ones place isn't possible, we borrow 1 ten from the tens place, making it 11 ones.

	Tens	Ones
•		
–		

	Tens	Ones
•		
–		
	3	6

B.4 SUBTRACTING WITHIN 100 WITH REGROUPING

Ex 31: Calculate:



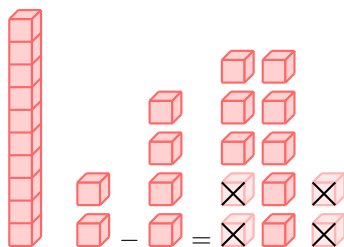
Answer:

- **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.

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

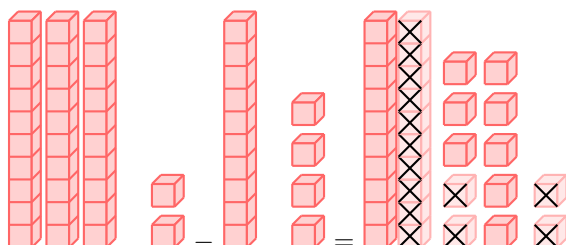


- **Step 2: Subtract the tens**

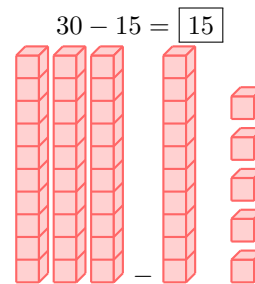
$$3 \text{ tens from } 32 - 1 \text{ ten from } 14 - 1 \text{ ten of borrowing} = 1 \text{ ten}$$

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

$$32 - 14 = 18$$



Ex 32: Calculate:



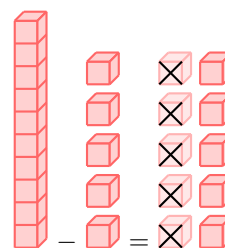
Answer:

- **Step 1: Subtract the ones**

$$0 \text{ ones} - 5 \text{ ones}$$

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

$$10 \text{ ones} - 5 \text{ ones} = 5 \text{ ones}$$

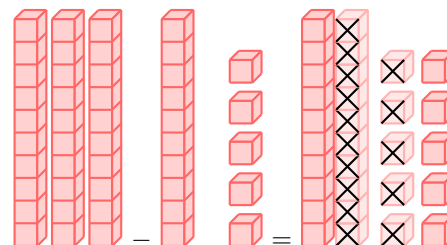


- **Step 2: Subtract the tens**

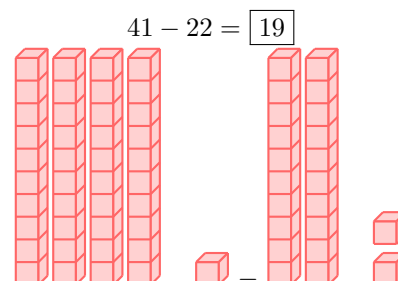
$$3 \text{ tens from } 30 - 1 \text{ ten from } 15 - 1 \text{ ten of borrowing} = 1 \text{ ten}$$

- **Result:** There is 1 ten and 5 ones. So,

$$30 - 15 = 15$$



Ex 33: Calculate:



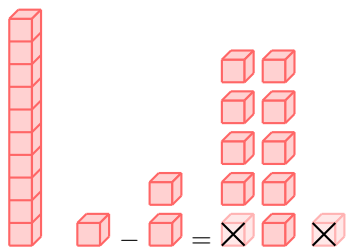
Answer:

- **Step 1: Subtract the ones**

$$1 \text{ one} - 2 \text{ ones}$$

We don't have enough ones, so we borrow 1 ten from the tens place, turning it into 10 ones. Now we have 11 ones.

$$11 \text{ ones} - 2 \text{ ones} = 9 \text{ ones}$$

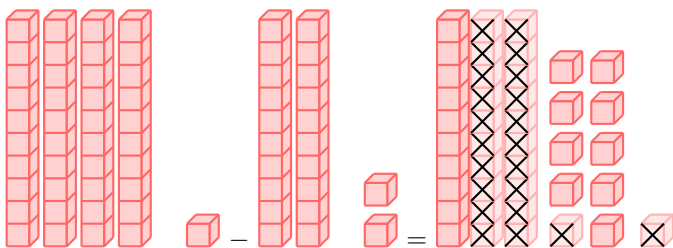


• **Step 2: Subtract the tens**

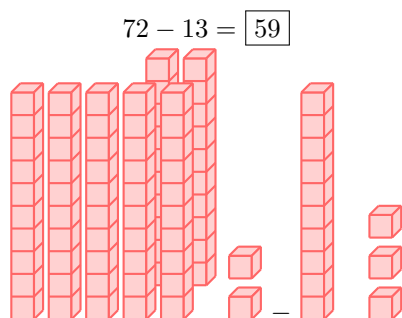
4 tens from 41 – 2 tens from 22 – 1 ten of borrowing = 1 ten

• **Result:** There is 1 ten and 9 ones. So,

$$41 - 22 = 19$$



Ex 34: Calculate:



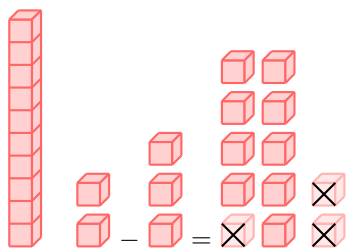
Answer:

• **Step 1: Subtract the ones**

2 ones – 3 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 ones – 3 ones = 9 ones

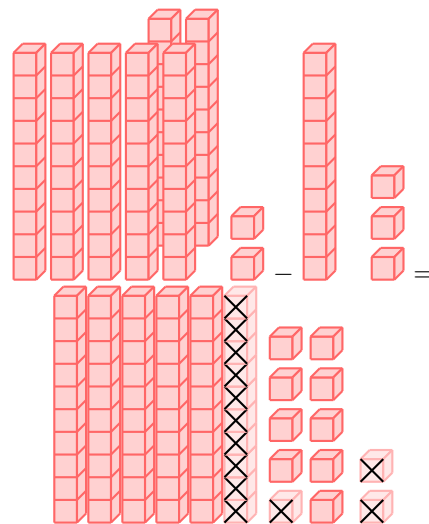


• **Step 2: Subtract the tens**

7 tens from 72 – 1 ten from 13 – 1 ten of borrowing = 5 tens

• **Result:** There are 5 tens and 9 ones. So,

$$72 - 13 = 59$$



C SUBTRACTION IN COLUMNS

C.1 SUBTRACTING USING COLUMNS TO 100 WITHOUT REGROUPING

Ex 35:

$$\begin{array}{r} 37 \\ - 14 \\ \hline 23 \end{array}$$

Answer:

• **Step 1: Set up the subtraction**

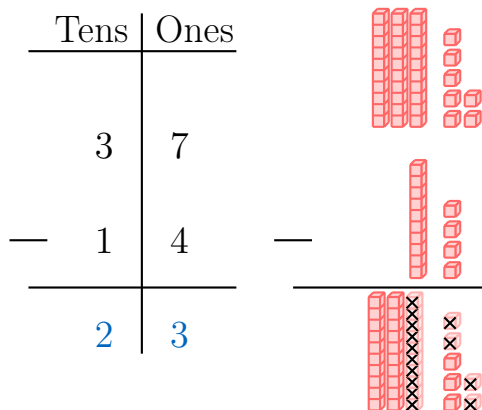
Tens	Ones
3	7
— 1	4

• **Step 2: Subtract the ones**

Tens	Ones
3	7
— 1	4
	3

7 ones – 4 ones = 3 ones

- **Step 3: Subtract the tens**



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

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

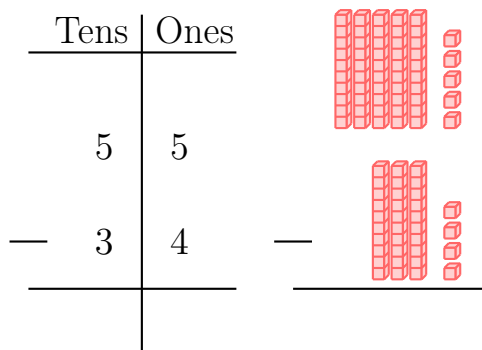
$$37 - 14 = 23$$

Ex 36:

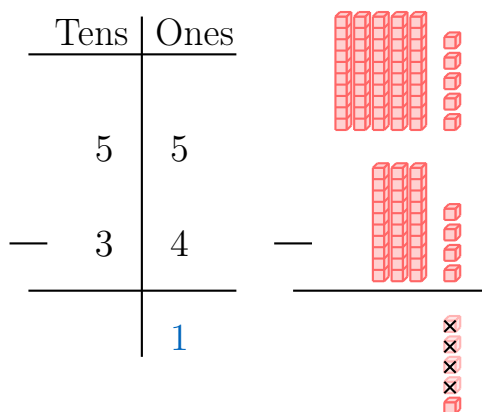
$$\begin{array}{r} 55 \\ - 34 \\ \hline \boxed{21} \end{array}$$

Answer:

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

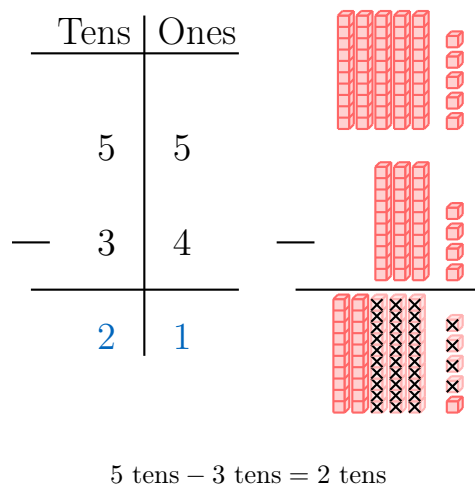


- **Step 2: Subtract the ones**



$$5 \text{ ones} - 4 \text{ ones} = 1 \text{ one}$$

- **Step 3: Subtract the tens**



- **Result:** There are 2 tens and 1 one. So,

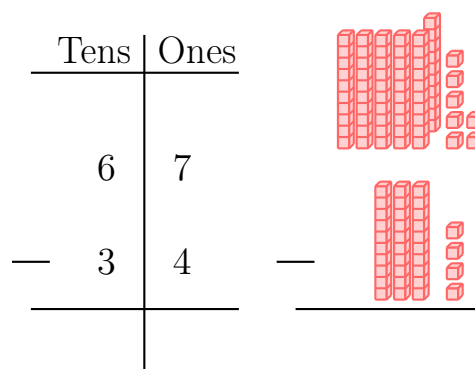
$$55 - 34 = 21$$

Ex 37:

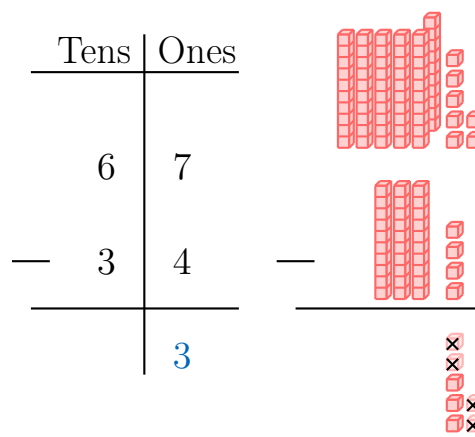
$$\begin{array}{r} 67 \\ - 34 \\ \hline \boxed{33} \end{array}$$

Answer:

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

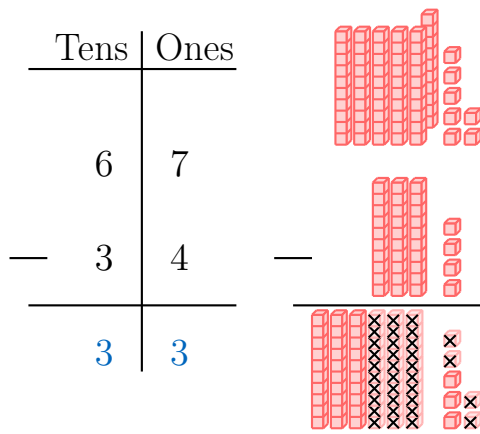


- **Step 2: Subtract the ones**



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

- **Step 3: Subtract the tens**



$$6 \text{ tens} - 3 \text{ tens} = 3 \text{ tens}$$

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

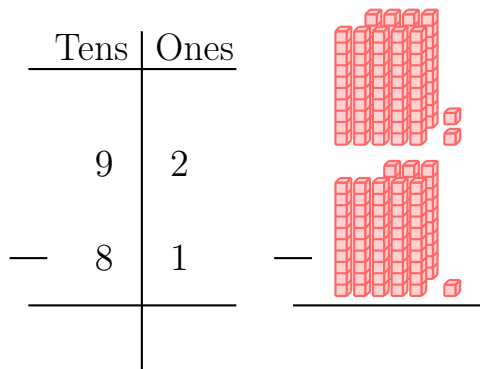
$$67 - 34 = 33$$

Ex 38:

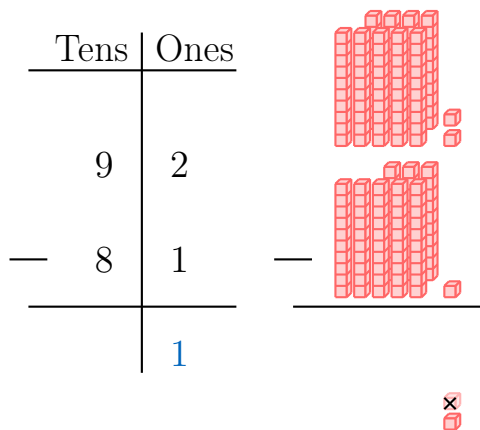
$$\begin{array}{r} 92 \\ - 81 \\ \hline \boxed{11} \end{array}$$

Answer:

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

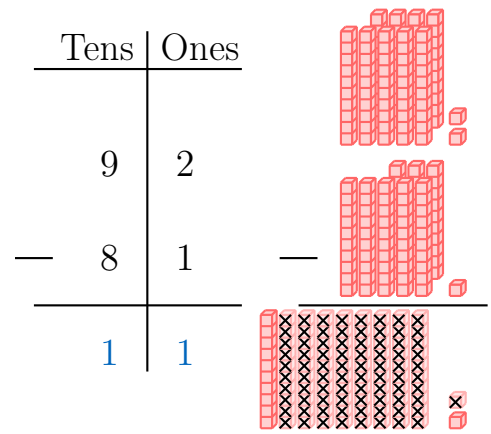


- **Step 2: Subtract the ones**



$$2 \text{ ones} - 1 \text{ one} = 1 \text{ one}$$

- **Step 3: Subtract the tens**



$$9 \text{ tens} - 8 \text{ tens} = 1 \text{ ten}$$

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

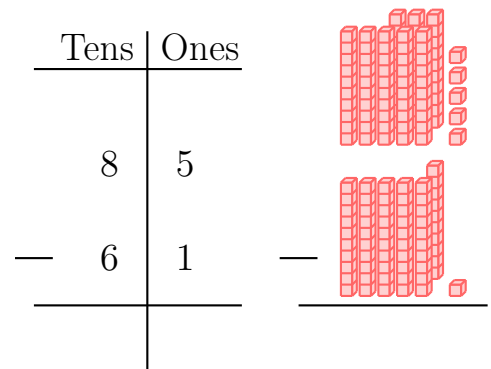
$$92 - 81 = 11$$

Ex 39:

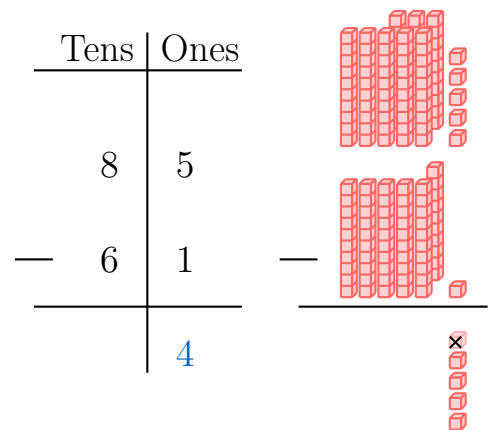
$$\begin{array}{r} 85 \\ - 61 \\ \hline \boxed{24} \end{array}$$

Answer:

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

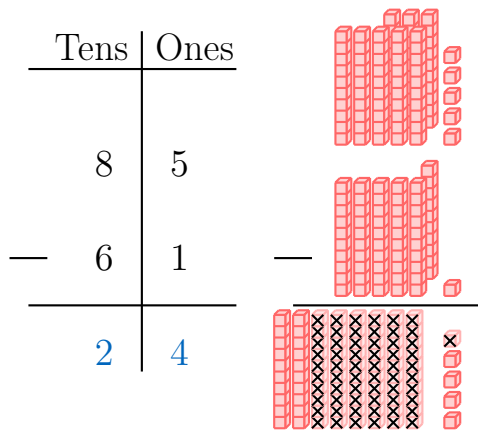


- **Step 2: Subtract the ones**



$$5 \text{ ones} - 1 \text{ one} = 4 \text{ ones}$$

- **Step 3: Subtract the tens**



$$8 \text{ tens} - 6 \text{ tens} = 2 \text{ tens}$$

- **Result:** There are 2 tens and 4 ones. So,

$$85 - 61 = 24$$

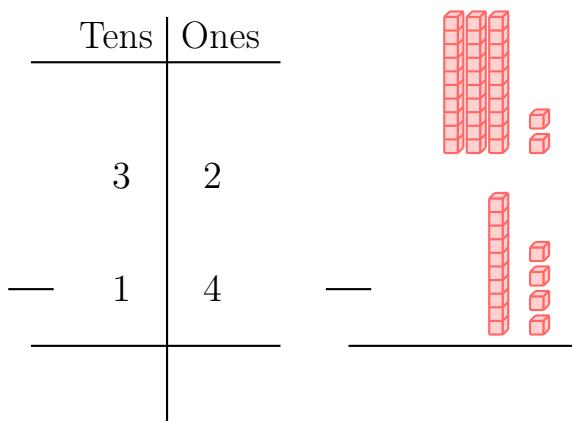
C.2 SUBTRACTING USING COLUMNS TO 100 WITH REGROUPING

Ex 40:

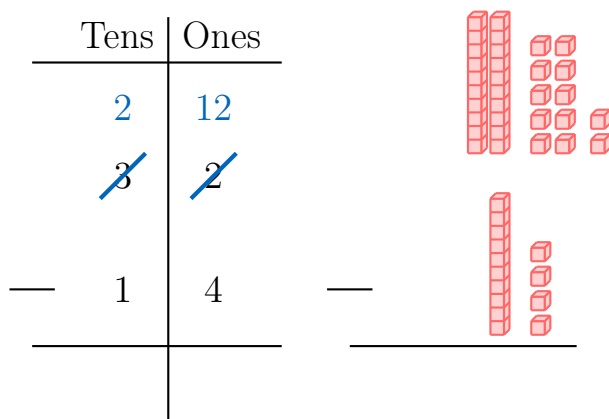
$$\begin{array}{r} 32 \\ - 14 \\ \hline 18 \end{array}$$

Answer:

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



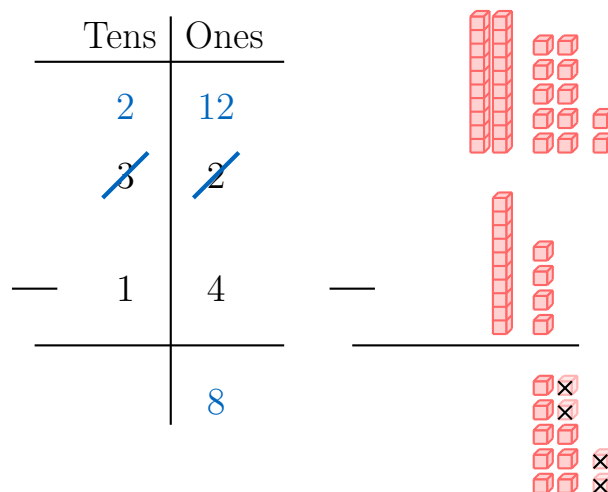
- **Step 2: Regroup 1 Ten**



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

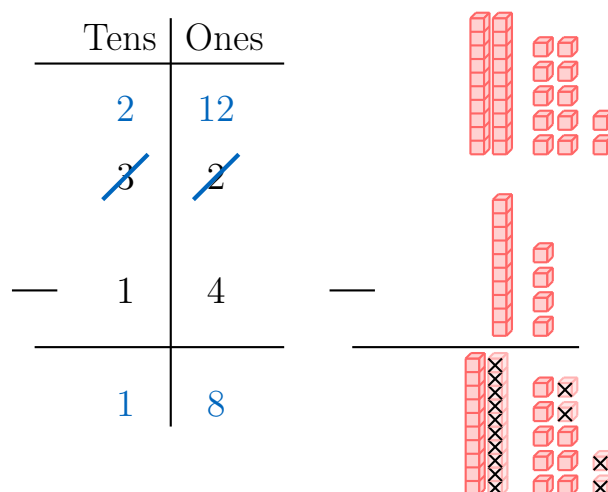
We don't have enough ones, so we borrow 1 ten from the tens place, turning it into 10 ones. Now we have 12 ones.

- **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,

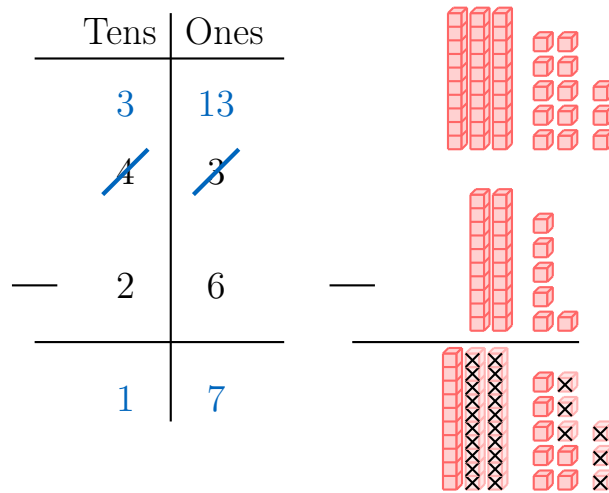
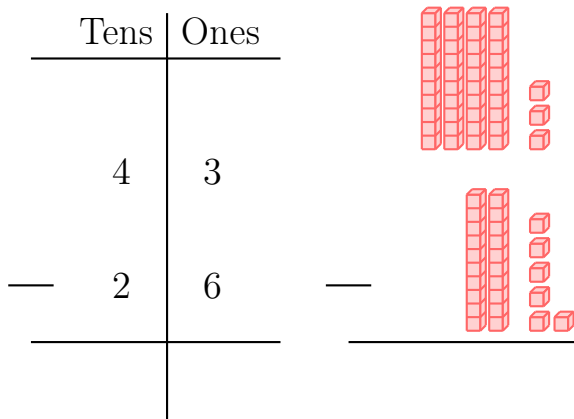
$$32 - 14 = 18$$

Ex 41:

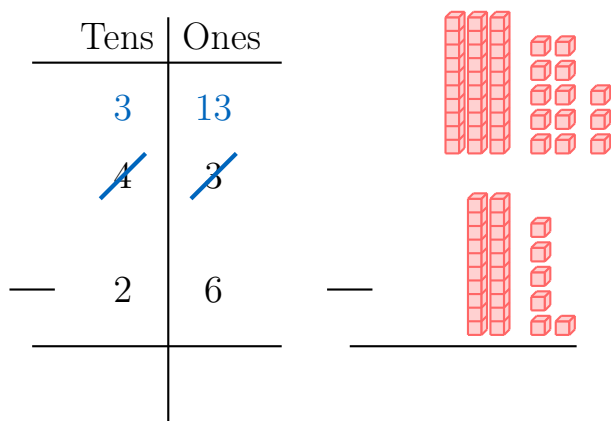
$$\begin{array}{r} 43 \\ - 26 \\ \hline 17 \end{array}$$

Answer:

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



• **Step 2: Regroup 1 Ten**



4 tens (from 43) – 2 tens (from 26) – 1 ten (borrowed) = 1 ten

• **Result:** There is 1 ten and 7 ones. So,

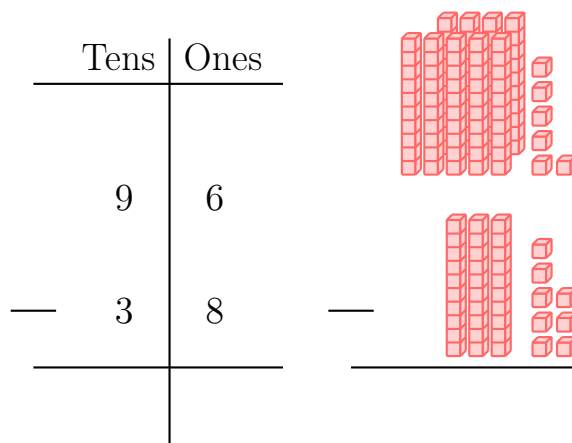
$$43 - 26 = 17$$

Ex 42:

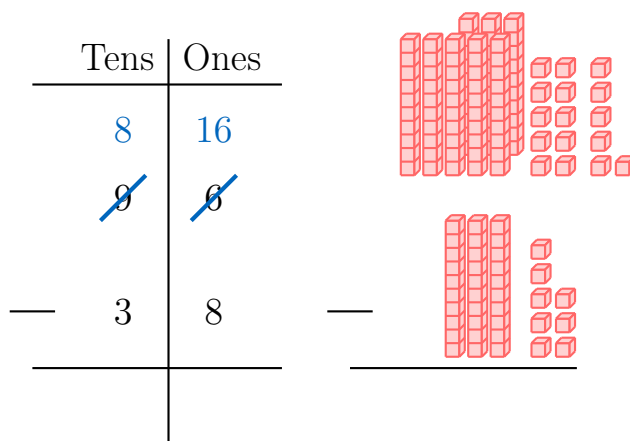
$$\begin{array}{r} 96 \\ - 38 \\ \hline 58 \end{array}$$

Answer:

• **Step 1: Set up the subtraction**

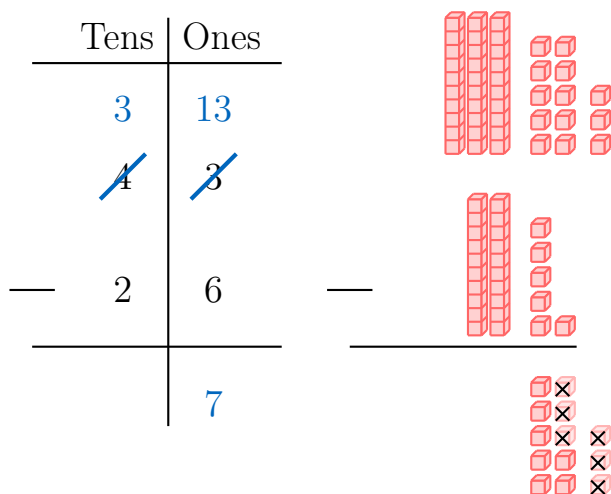


• **Step 2: Regroup 1 Ten**



We don't have enough ones, so we borrow 1 ten from the tens place, turning it into 10 ones. Now we have 13 ones.

• **Step 3: Subtract the ones**



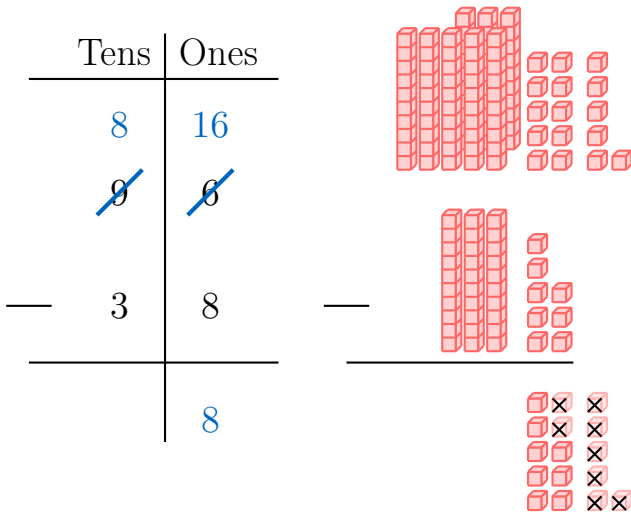
$$13 \text{ ones} - 6 \text{ ones} = 7 \text{ ones}$$

• **Step 4: Subtract the tens**

6 ones – 8 ones

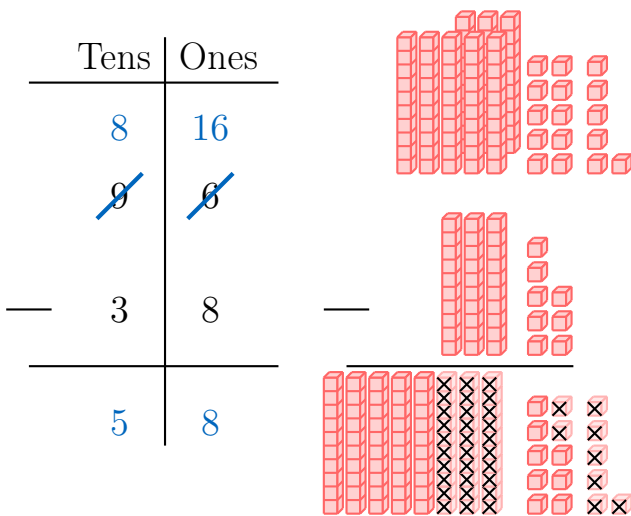
We don't have enough ones, so we borrow 1 ten from the tens place, turning it into 10 ones. Now we have 16 ones.

• Step 3: Subtract the ones



16 ones – 8 ones = 8 ones

• Step 4: Subtract the tens



9 tens (from 96) – 3 tens (from 38) – 1 ten (borrowed) = 5 tens

• Result: There are 5 tens and 8 ones. So,

$$96 - 38 = 58$$

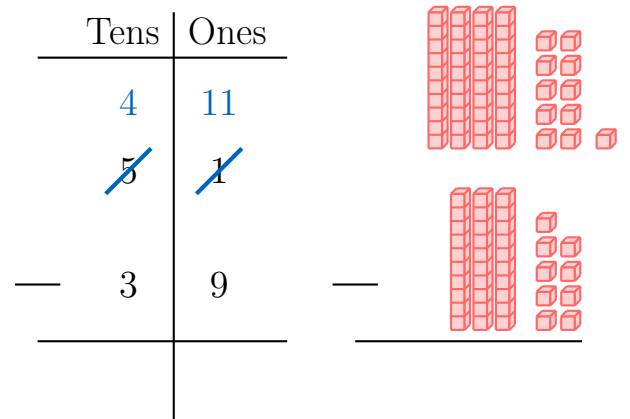
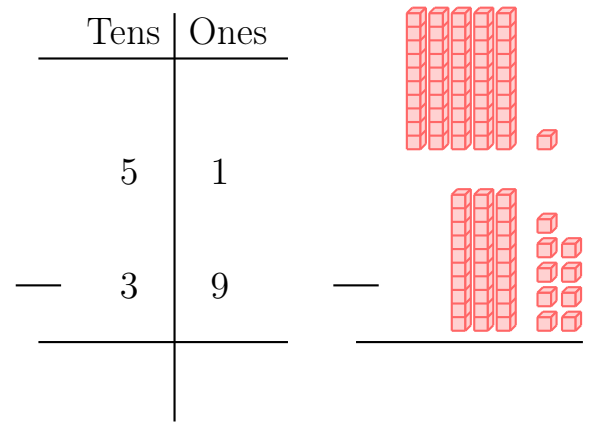
Ex 43:

$$\begin{array}{r} 51 \\ - 39 \\ \hline 12 \end{array}$$

Answer:

• Step 1: Set up the subtraction

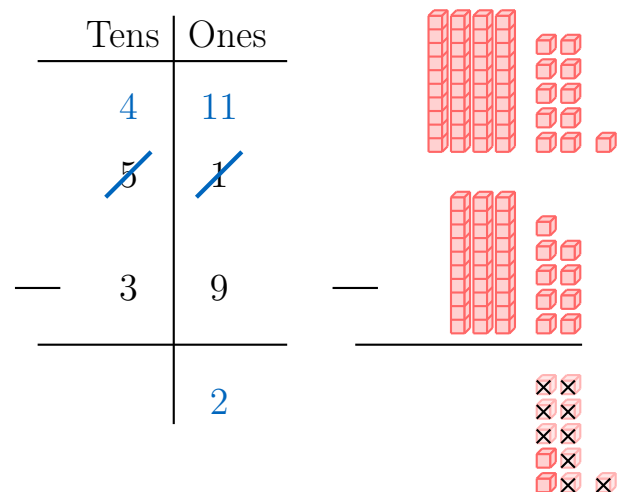
• Step 2: Regroup 1 Ten



1 one – 9 ones

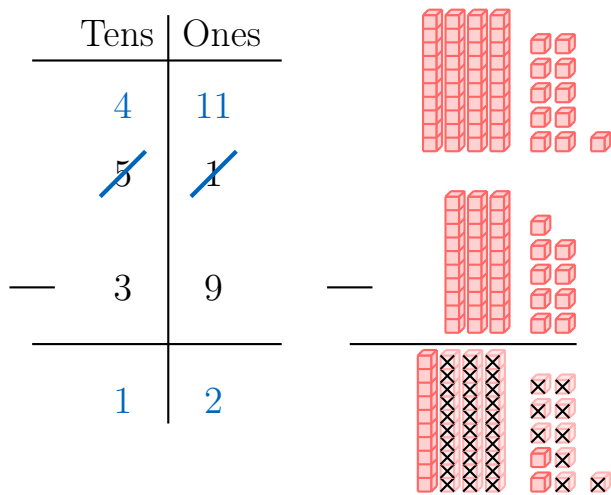
We don't have enough ones, so we borrow 1 ten from the tens place, turning it into 10 ones. Now we have 11 ones.

• Step 3: Subtract the ones



11 ones – 9 ones = 2 ones

• Step 4: Subtract the tens



5 tens (from 51) – 3 tens (from 39) – 1 ten (borrowed) = 1 ten

- **Result:** There is 1 ten and 2 ones. So,

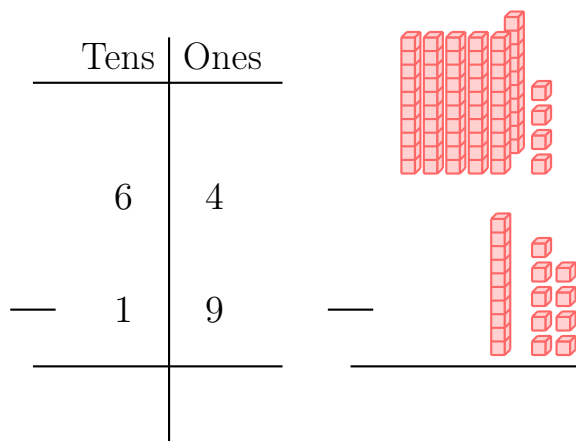
$$51 - 39 = 12$$

Ex 44:

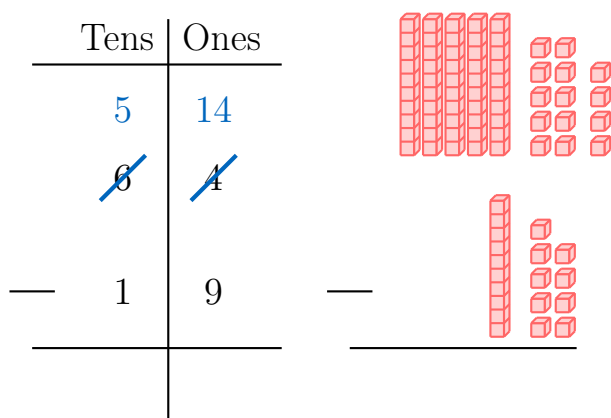
$$\begin{array}{r} 64 \\ - 19 \\ \hline \boxed{45} \end{array}$$

Answer:

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



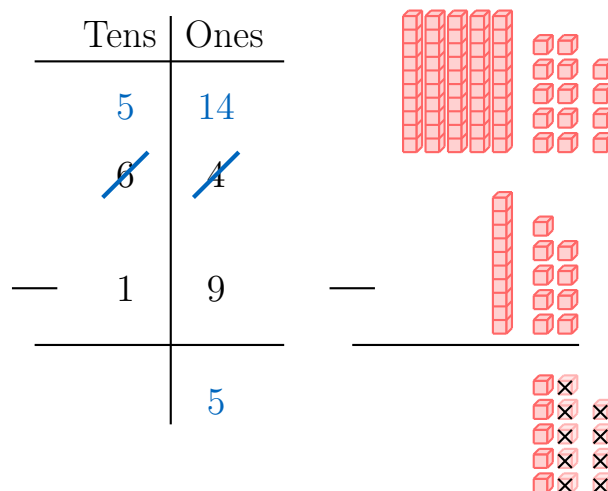
- **Step 2: Regroup 1 Ten**



$$4 \text{ ones} - 9 \text{ ones}$$

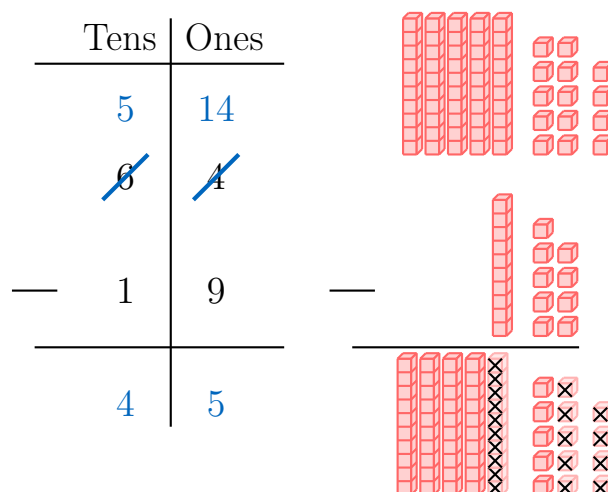
We don't have enough ones, so we borrow 1 ten from the tens place, turning it into 10 ones. Now we have 14 ones.

- **Step 3: Subtract the ones**



$$14 \text{ ones} - 9 \text{ ones} = 5 \text{ ones}$$

- **Step 4: Subtract the tens**



6 tens (from 64) – 1 ten (from 19) – 1 ten (borrowed) = 4 tens

- **Result:** There are 4 tens and 5 ones. So,

$$64 - 19 = 45$$

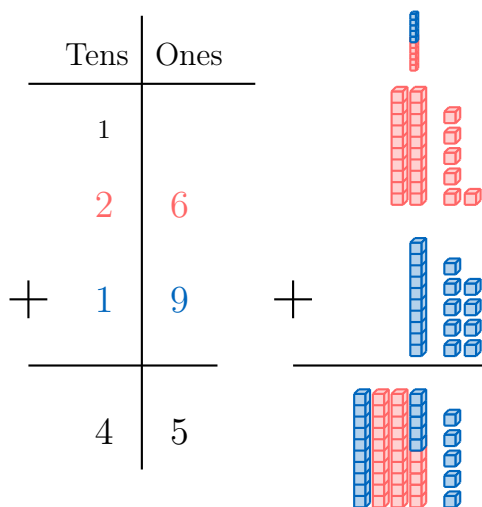
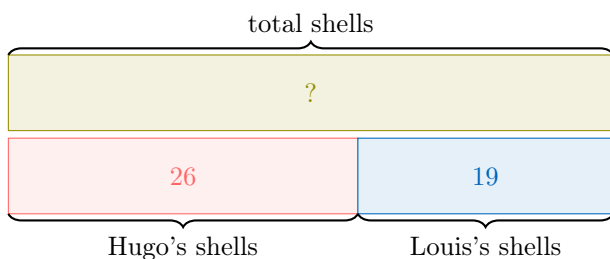
C.3 SOLVING REAL-WORLD PROBLEMS

Ex 45: Hugo and Louis are looking for shells. Hugo found 26 shells, and Louis found 19 shells. How many shells do they have together in total?

$$\boxed{45} \text{ shells}$$

Answer:

- To find the total number of shells, start with the number of shells Hugo found, then add the number of shells Louis found.



- So, the total number of shells is $26 + 19 = 45$.

Ex 46: You buy an article for 16 dollars. You give the seller a 50 dollar bill.

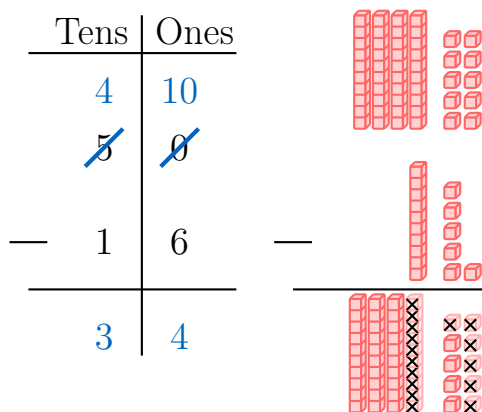
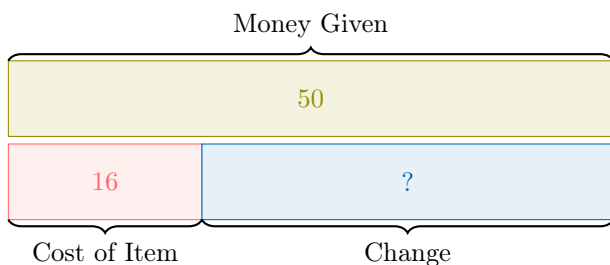
How much change will you get back?

34

 dollars

Answer:

- To find out how much change you'll get back, start with the amount you gave the seller and subtract the cost of the item.



- So, the change you'll get back is $50 - 16 = 34$ dollars.

Ex 47: Last year, Louis weighed 29 kilos. This year, he gained 12 kilos.

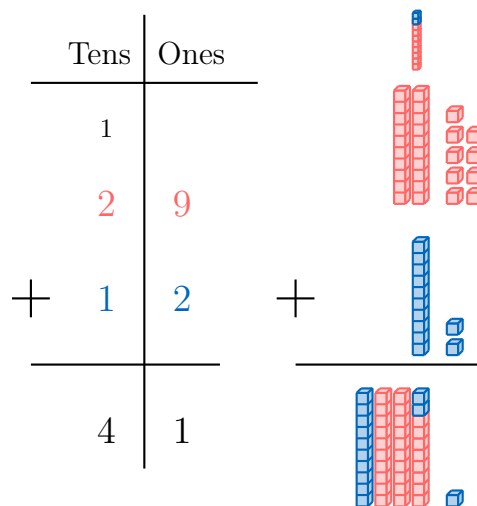
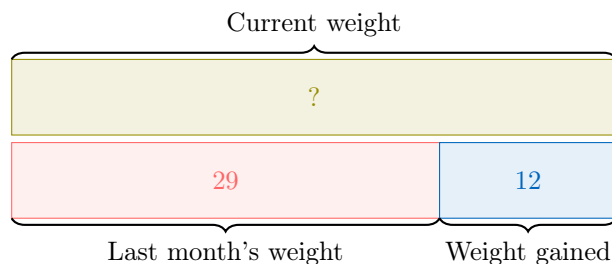
How much does Louis weigh now?

41

 kilos

Answer:

- To find Louis's current weight, start with his previous weight and add the weight he gained this year.



- So, Louis's current weight is $29 + 12 = 41$ kilos.

Ex 48: You buy an article for 54 dollars. You give the seller a 50 dollar bill and a 20 dollar bill.

How much change will you get back?

16

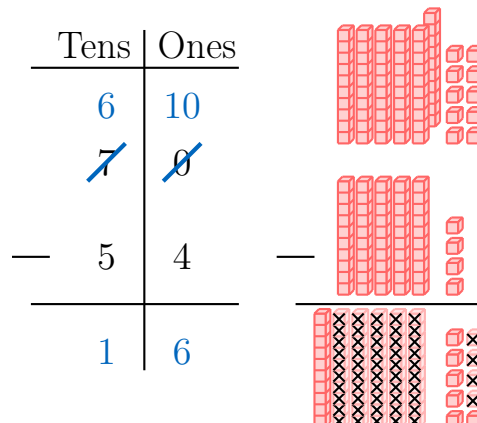
 dollars

Answer:

- To find out how much change you'll get back, start by adding up the total amount you gave the seller.

$$50 + 20 = 70$$

- Then subtract the cost of the item.



- So, the change you'll get back is $70 - 54 = 16$ dollars.