

Grade 2 · Adding Within 100 · Lesson

Common Core 2.NBT.B.5, 2.NBT.B.6 · mathovore.fr

To add two-digit numbers, add the tens and add the ones, then combine the results. When the ones make 10 or more, regroup: 10 ones become 1 ten. In $38 + 27$ the ones are $8 + 7 = 15$, so the sum is 65. You can also add three or four two-digit numbers.

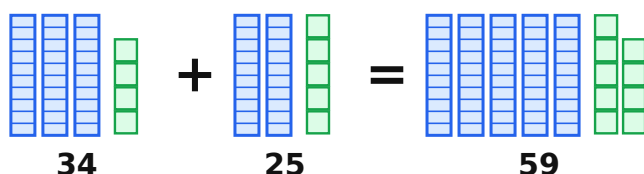
Grade 2 Common Core: 2.NBT.B.5 · 2.NBT.B.6

Key facts:

- Add tens to tens and ones to ones, then combine the parts.
- Regroup when the ones make 10 or more: 10 ones become 1 ten.
- An open number line adds by jumping tens first and then ones.
- Numbers can be added in any order, so group the easy pairs first.
- Add three or four two-digit numbers two at a time.

How do you add two-digit numbers without regrouping?

Every two-digit number has tens and ones. To add $34 + 25$, add the tens: $30 + 20 = 50$. Add the ones: $4 + 5 = 9$. Then put them together: $50 + 9 = 59$.



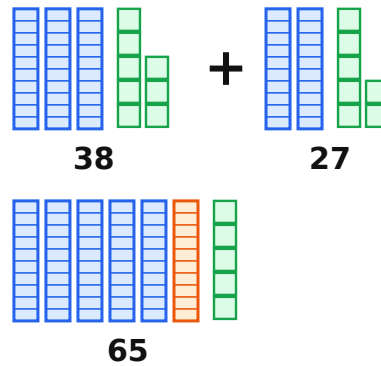
Three tens and four ones plus two tens and five ones makes five tens and nine ones.

What is regrouping?

Regrouping

Regrouping means trading 10 ones for 1 ten. A ten rod is worth the same as 10 small cubes.

Try $38 + 27$. The ones are $8 + 7 = 15$. That is 1 ten and 5 ones. Trade the 10 ones for a new ten rod.



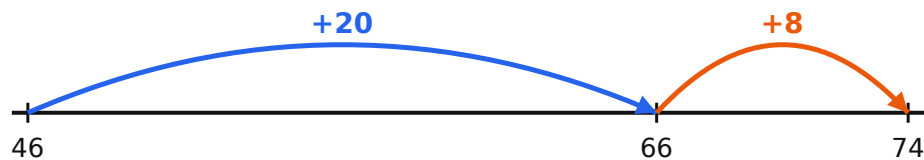
The orange rod is the new ten made from 10 ones. The sum is 6 tens and 5 ones, or 65.

1. Add the ones.
2. If there are 10 or more ones, regroup 10 ones as 1 ten.
3. Add the tens, and include the new ten.
4. Write the tens and ones together.

Example: $47+36$. The ones are $7+6=13$, which is 1 ten and 3 ones. The tens are $4+3+1=8$. The sum is 83.

How can an open number line help?

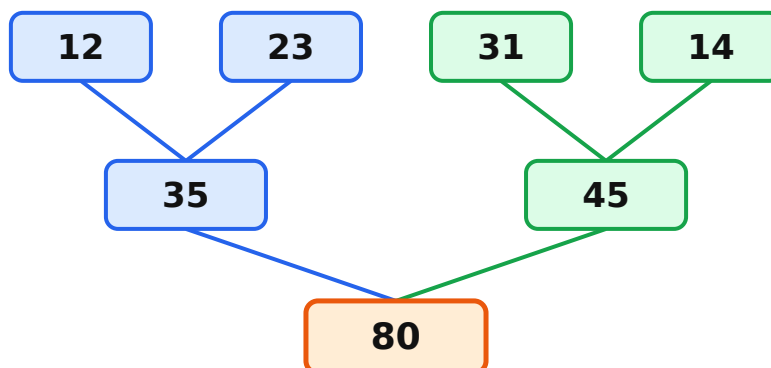
Start at the first number. Jump by tens, then jump by ones. To find $46+28$, jump 20 and then 8.



From 46 jump 20 to 66, then jump 8 to 74. So $46 + 28 = 74$.

How do you add three or four two-digit numbers?

Add two numbers at a time. Look for pairs that are easy. Because you can add numbers in any order, you can group the pairs you like.



Add pairs first: $12 + 23 = 35$ and $31 + 14 = 45$. Then $35 + 45 = 80$.

Any order

Numbers can be added in any order, and any two can be added first. The sum stays the same.

Strategy	Example
Break apart tens and ones	$46 + 37 = (40 + 30) + (6 + 7) = 70 + 13 = 83$
Jump on an open number line	$46 + 28: 46, 66, 74$
Add pairs first	$12 + 23 + 31 + 14 = 35 + 45 = 80$

Adding Within 100: frequently asked questions

What does regroup mean when adding?

Regroup means trading 10 ones for 1 ten. In $38 + 27$, the ones make 15, so 10 ones become 1 more ten and 5 ones stay.

When do I need to regroup?

Regroup when the ones add up to 10 or more. For $24 + 35$, $4 + 5 = 9$, so no regrouping is needed.

How do I add three two-digit numbers?

Add the first two numbers, then add the third to that sum. For $20 + 30 + 40$, add $20 + 30 = 50$ and then $50 + 40 = 90$.

Can I add numbers in any order?

Yes. The order does not change the sum. You can add the pair that is easiest first, such as $18 + 22 = 40$ before adding other numbers.

How can I check my answer?

Use subtraction. If $64 + 19 = 83$, then $83 - 19$ must equal 64. If it does not, look for a missed regroup.