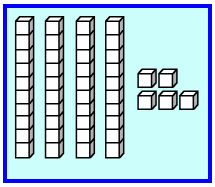
Regrouping in Subtraction, Part 1

We will now study regrouping (also called "borrowing") in subtraction.

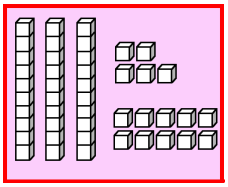
As a first step, we study breaking a ten-pillar into ten little cubes. This is called ***regrouping***, because one ten "changes groups" from the tens group into the ones.



4 tens 5 ones

First we have 45. We "break" one ten-pillar into little cubes.

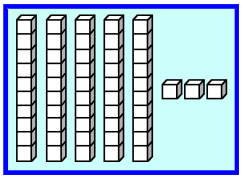
Break a ten.



3 tens 15 ones

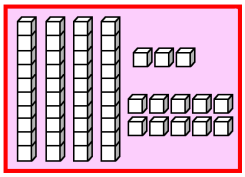
Now we have 3 tens and 15 ones. It is still 45, but written in a different way.

Here is another example. First we have 5 tens 3 ones. We "break" one ten-pillar into 10 little cubes. We end up with 4 tens 13 ones.



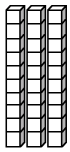
5 tens 3 ones

Break a ten.

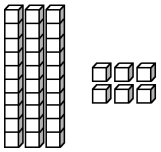


4 tens 13 ones

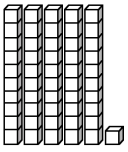
1. Break a ten into 10 ones. What do you get? Draw or use manipulatives to help.

a. 

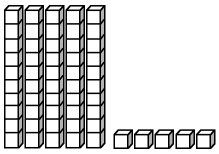
3 tens 0 ones ⇨ ___tens ____ones

b. 

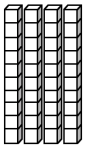
___ tens ____ones ⇨ ___ tens ____ones

c. 

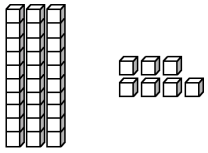
___ tens ____ones ⇨ ___tens ____ones

d. 

___ tens ____ones ⇨ ___ tens ____ones

e. 

___ tens ____ones ⇨ ___tens ____ones

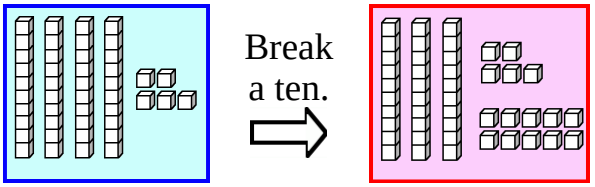
f. 

___ tens ____ones ⇨ ___ tens ____ones

Let's study subtraction. The pictures on the right illustrate 45 – 17.

First, a ten is broken into 10 ones. So, 4 tens 5 ones becomes 3 tens 15 ones.

After that, cross out (subtract) 1 ten 7 ones.



4 tens 5 ones 3 tens 15 ones

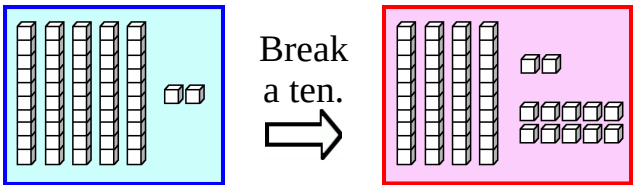
Cross out 1 ten 7 ones (from the *second* picture).

What is left? ____ tens ____ ones

The pictures on the right illustrate 52 – 39.

First, a ten is broken into 10 ones. So, 5 tens 2 ones becomes 4 tens 12 ones.

After that, cross out (subtract) 3 tens 9 ones.

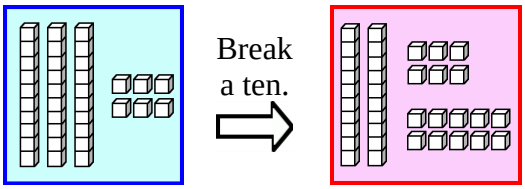


5 tens 2 ones 4 tens 12 ones

Cross out 3 tens 9 ones (from the *second* picture).

What is left? ____ tens ____ ones

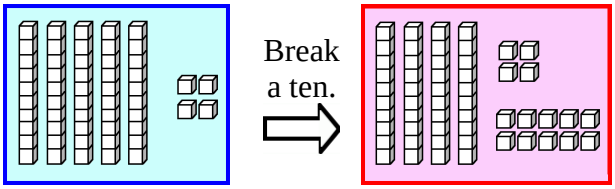
2. Fill in. Always subtract (cross out some) from the *second* picture.



3 tens 6 ones 2 tens 16 ones

a. Subtract 8 ones (from the *second* picture).

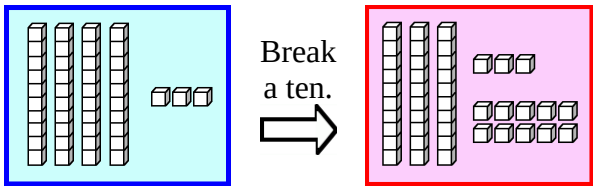
What is left? ____ tens ____ ones



___ tens ___ ones ___ tens ___ ones

b. Subtract 2 tens 7 ones.

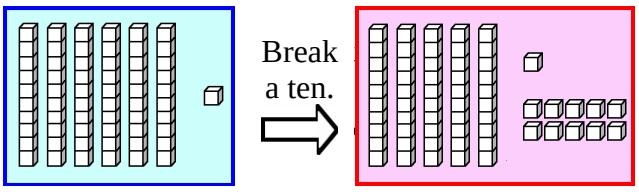
What is left? ____ tens ____ ones



___ tens ___ ones ___ tens ___ ones

c. Cross out 2 tens 5 ones.

What is left? ____ tens ____ ones



___ tens ___ ones ___ tens ___ ones

d. Cross out 4 tens 4 ones.

What is left? ____ tens ____ ones

3. First, break a ten. Then subtract ones and tens separately. Look at the example.

a.

5 tens 5 ones ⇨

	4	tens	15	ones
–	3	tens	7	ones
	1	ten	8	ones

b.

7 tens 2 ones ⇨

	____	tens	____	ones
–	3	tens	5	ones
	____	tens	____	ones

c.

6 tens 0 ones ⇨

	____	tens	____	ones
–	2	tens	7	ones
	____	tens	____	ones

d.

6 tens 4 ones ⇨

	____	tens	____	ones
–	3	tens	8	ones
	____	tens	____	ones

e.

7 tens 6 ones ⇨

	____	tens	____	ones
–	4	tens	7	ones
	____	tens	____	ones

f.

5 tens 0 ones ⇨

	____	tens	____	ones
–	2	tens	2	ones
	____	tens	____	ones

g.

8 tens 1 one ⇨

	____	tens	____	ones
–	6	tens	5	ones
	____	tens	____	ones

h.

6 tens 3 ones ⇨

	____	tens	____	ones
–	2	tens	8	ones
	____	tens	____	ones

4. Jessica had 27 colored pencils and her brother and sister had none. Then Jessica gave 10 of them to her brother, and four to her sister.

a. How many pencils does Jessica have now?

b. How many more pencils does Jessica have than her brother?

c. How many more pencils does Jessica have than her sister?