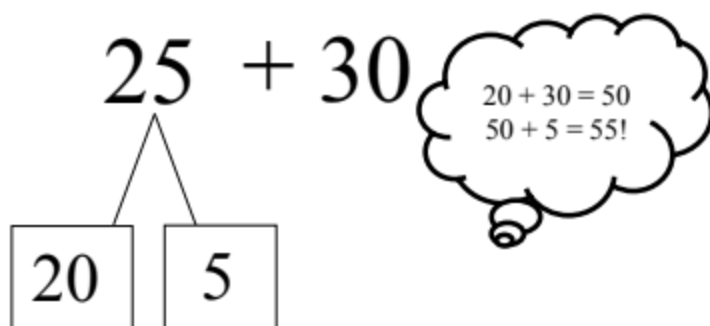


## Sums and Differences within 100

They can add and subtract using number bonds to compose (bundle) or decompose (unbundle).



Students relate one-more one-less and ten-more ten-less to addition and subtraction. They recognize that they must add and subtract like units, and that the digit in the tens place changes when adding and subtracting a ten, just as the digit in the ones place changes when adding or subtracting a one. They learn to record the addition and subtraction of tens and ones using arrow notation.

Arrow Notation

$$\underline{59} \xrightarrow{+10} \underline{69} \xrightarrow{+10} \underline{79}$$

$$\underline{38} \xrightarrow{-1} \underline{37} \xrightarrow{-1} \underline{36}$$

If a child has to add  $47 + 21$ , they can use the answer to  $47 + 20$  to help them by just adding one more to that answer. Here's how:

Well, I know that  $47 + 21$  is 1 more than  $47 + 20$  so...

$$47 + 21 = ?$$

$$47 \xrightarrow{+10} 57 \xrightarrow{+10} 67 \xrightarrow{+1} 68$$

$$47 + 21 = 68$$

Students will also be asked to show their thinking when adding and subtracting multiples of 10 and some ones by using tape diagrams in this module. They will be using the strategy one more, one less in some scenarios with tape diagrams also.

$$61 - 29 =$$

If I add the same number amount to both numbers the difference stays the same.

+1	61
+1	29
$62 - 30 = 32$	
Carlos has 32 t-shirts left.	

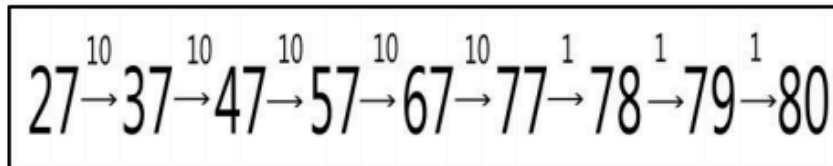
$$61 - 29 = 62 - 30$$

Both problems have a difference of 32.  
The problem on the right is easier to subtract.

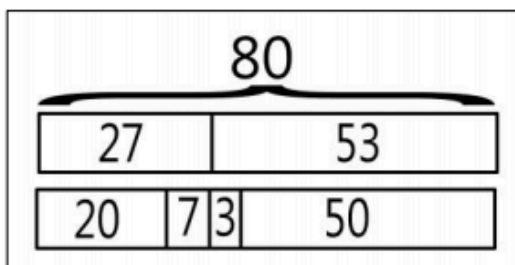
Students will finally be expected to use all of the strategies that they have learned in Topic A to solve one- and two-step word problems. Some scenarios will allow the student to choose their method while others will specify which strategy to use. The students should be able to solve problems using more than one strategy.

27 markers were in a crate. Sandra added 53 to it. How many markers are in the crate now?

The arrow way:



Tape Diagram:



Number Bond:

