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## Reference

## CrossNumber ${ }^{\text {tm }}$ Puzzles

## Lesson

A number below a diagonal shows a sum for the squares underneath. A number above a diagonal shows a sum for the squares to the right.

You are to write any digit from 1 through 9, one digit per square, so that their sums are correct. You may use a digit more than once in the puzzle, but you may not use it more than once for any one sum.


To solve the puzzle, look for sums that will be forced. (For example, don't start with 15 because there are several ways to get a sum of 15 from three digits.)
We will start with 3 , which has to be either $1+2$ or $2+1$. See what happens when we try $2+1$.


Now 4 has to be $2+2$, but we are not allowed to use the same digit twice for a sum. So 3 has to be $1+2$, and 4 is forced to be $1+3$.

