## Box - Intermediate Puzzle \#25



This puzzle is like a crossword, but with numbers. Each digit occupies a 3D block and can be a part of a "word" in the $\mathrm{X}, \mathrm{Y}$, and Z directions.

## Rules:

1. "Words" may not start with a zero.
2. "Words" in the $X$ direction read from left to right.
3. "Words" in the Y direction read from top to bottom.
4. "Words" in the $Z$ direction read from front to back.
5. There is one unique solution which satisfies all the clues given below.
6. Some "words" may not have clues. They will be determined by the "words" which intersect them.

If we take the box pictured above and divide it into individual X -Y layers, we will get these planes:


## X Direction

1 Ninety-three times a prime number
7 Z4 minus Y10
9 Seven times a prime number
12 A prime number
14 Same as Z14
15 A prime number
17 A prime number
19 Mean of Z3 and Z14

## Y Direction

1 Z7 minus X19
4 Rearranged digits of Y1
9 A prime number
10 A prime number
11 Z5 minus X14
15 Fourteen times Y16
16 Consecutive digits in descending order 7 Twice the result of Z2 plus Z6
18 Same as X14

## Z Direction

1 Z8 plus X14
2 Eleven times a prime number
3 Y15 divided by fourteen
4 Five times a prime number
5 Y18 plus Y11
6 Three times X19
8 Z5 plus Y15
13 Mean of Z3 and Y16
$14 \mathrm{Z5}$ minus Y11

## Solution:



