## Cube - Intermediate Puzzle \#3



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 cube pictured above and divide it into individual X - Y layers, we will get these planes:


## X Direction

4 Mean of X5 and Z7
5 Z4 plus X11
8 Six times a prime number
11 Y5 divided by six

## Y Direction

2 Z3 reversed
3 Z2 divided by Y2
5 Y7 times Z7
6 Z9 plus Y7
7 Mean of Z7 and Z5
10 A cube

## Z Direction

1 Y5 divided by four
2 Z3 times Y2
3 Y6 minus Z9
4 Fifteen times Z5
5 A prime number
7 Z1 minus X11
9 Y10 minus Z1

## Solution:

|  | 3 |  | 1 | 9 | 1 | 1 |  | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 |  | 1 | 5 | 8 | 2 | 2 | 6 |  |
| 1 | 0 | 2 | 6 |  |  | 5 |  |  |

