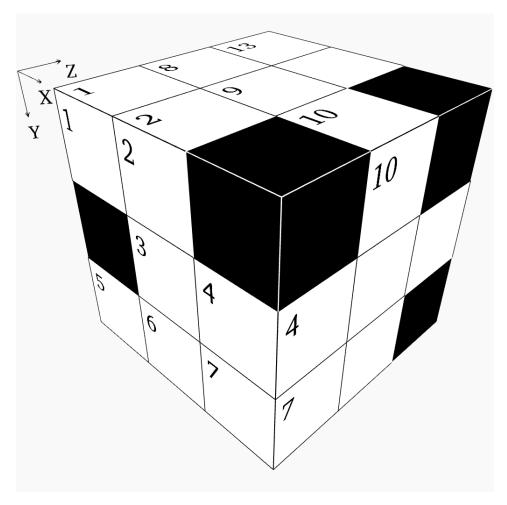
Cube - Intermediate Puzzle #15



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 X,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:

1	2		8	9	10	13	
	3	4	11				
5	6	7	12				

X Direction

- 1 Same as Y4
- **3** Y4 plus X1
- 5 Y9 minus Z2 8 Z7 plus Y8
- **11** Y9 reversed
- **12** Z6 plus half of Y10
- 13 Consecutive digits in descending order

Y Direction

- 2 Twice the result of Z1 plus Y13
- **4** Y9 divided by thirty-seven
- 8 One hundred sixty-nine less than Z2
- **9** Thirty-seven times X1
- **10** Twice a prime number
- **13** A prime number

Z Direction

- 1 Rearranged digits of Y8
- 2 Sixty-nine more than Z6
- 3 Consecutive digits in ascending order
- **4** X11 plus Z11
- **5** A cube
- **6** Thirty-three times a prime number
- 7 Mean of X13 and X3
- 11 Consecutive digits in descending order

Solution:

2	6		5	9	1	7	6	
	5	2	2	6	9	1		0
2	6	6	7	2	4		7	