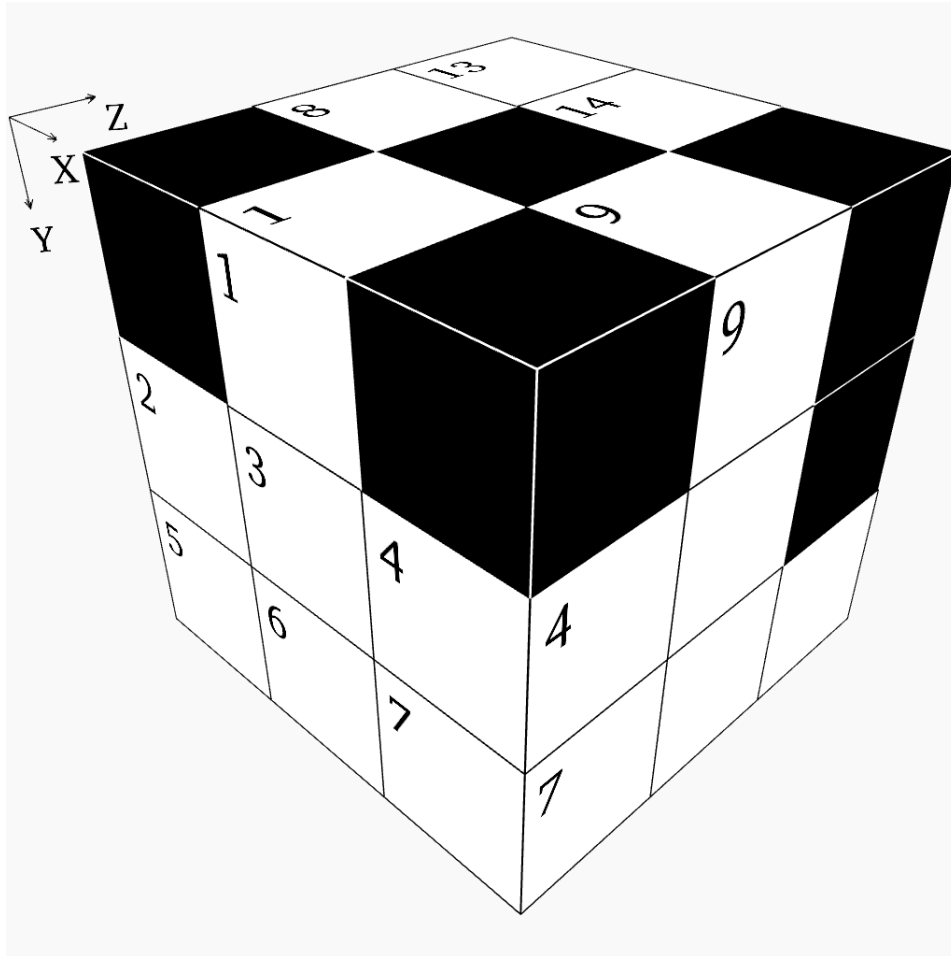


## Cube - Intermediate Puzzle #47



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		8		9	13	14	
2	3	4	10	11				
5	6	7		12		15		

**X Direction**

- 2 Z3 plus Y11
- 5 Thirteen times Y11
- 10 Four times a prime number
- 12 All digits are the same
- 13 A square
- 15 Twelve more than Y2

**Y Direction**

- 1 Four times X10
- 2 X10 minus Z8
- 4 Twice the result of X15 minus Z2
- 8 X13 plus half of Z8
- 9 Y14 plus Z4
- 11 Half of Y2
- 14 Twenty-two times X13

**Z Direction**

- 2 Mean of Y4 and X10
- 3 X2 minus half of Y2
- 4 Mean of X13 and Y8
- 6 Y1 minus half of X5
- 7 Eight times a prime number
- 8 X5 divided by twelve

**Solution:**

	5		5		5	2	5	
9	9	3	1	4	8		5	
6	2	4		8	8	1	0	8