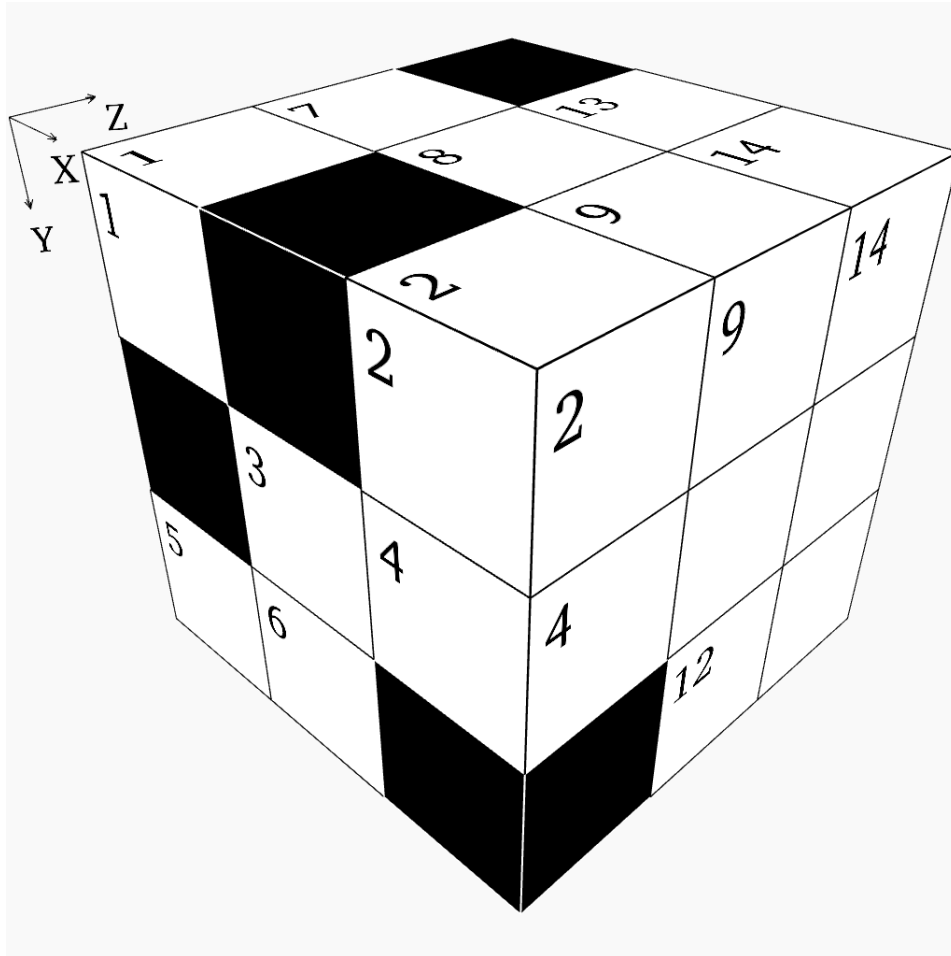


Cube - Intermediate Puzzle #28



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

X Direction

- 3 Mean of Y13 and Z1
- 5 X13 minus Z8
- 7 A square
- 10 Z4 divided by five
- 11 A prime number
- 13 Three times a prime number
- 15 Six times Z1

Y Direction

- 2 Y3 divided by seven
- 3 Z2 minus Z8
- 8 Seven times a prime number
- 9 A prime number
- 13 Z5 minus Z1
- 14 Twice a prime number
- 15 Consecutive digits in ascending order

Z Direction

- 1 Y13 minus Y15
- 2 Y2 plus half of Y14
- 3 Three times a prime number
- 4 Twice the result of Z3 minus Y8
- 5 Twice X3
- 6 Mean of Y3 and X5
- 8 X5 plus Z1
- 12 Sum of digits in X15

Solution:

6		1	5	7	6		9	3
	8	2		4	0	3	9	0
1	4		6	9	1	4		2