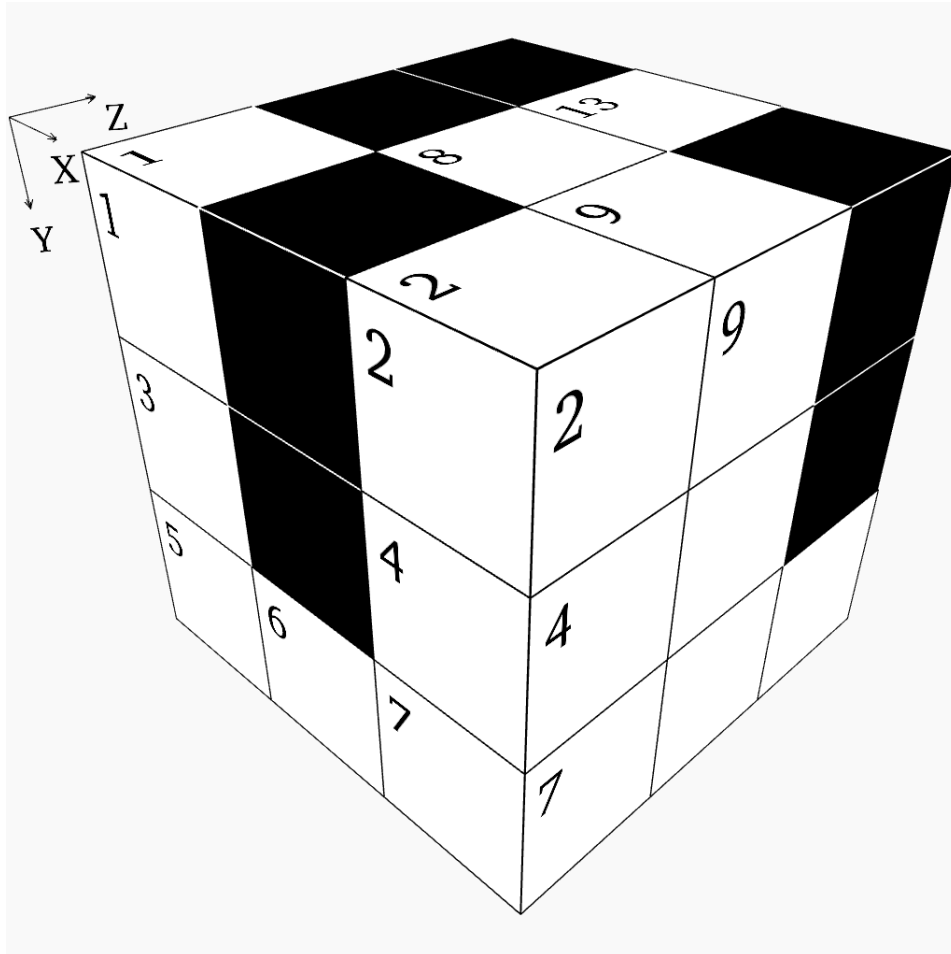


Cube - Intermediate Puzzle #45



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		13	
3		4	10	11		14		
5	6	7		12			15	

X Direction

- 5 Twelve times Z11
- 8 A prime number
- 10 Mean of X12 and X5
- 12 Twelve times a prime number
- 14 Twice the result of Z11 minus Z2
- 15 A prime number

Y Direction

- 1 X12 plus Y2
- 2 Two-thirds of Z6
- 8 Z7 minus half of Y1
- 9 A square
- 13 Twenty-seven times a prime number

Z Direction

- 2 A prime number
- 3 Mean of Z6 and X8
- 4 Three-fourths of Z11
- 6 Three times a prime number
- 7 Rearranged digits of X10
- 8 X5 divided by Z4
- 11 Half of Y9

Solution:

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