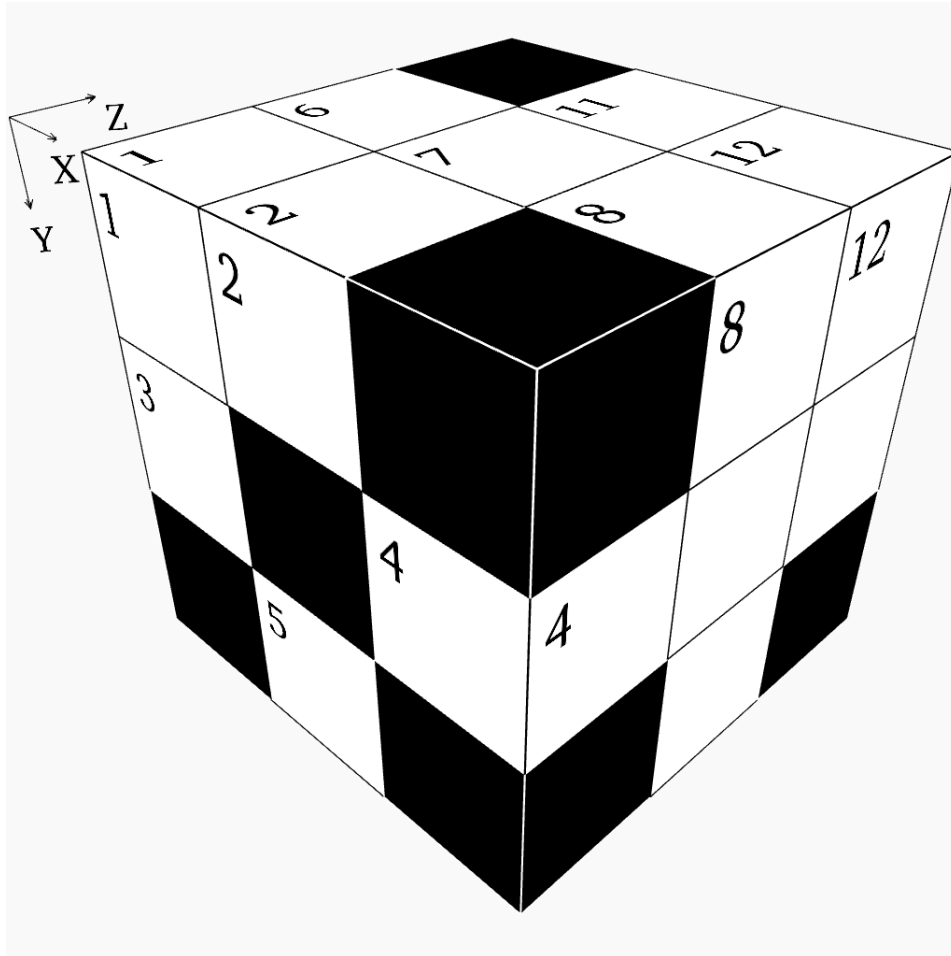


Cube - Intermediate Puzzle #49



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		6	7	8		11	12
3		4	9					
	5		10			13		

X Direction

- 1 X9 minus Y8
- 6 Mean of Y7 and Z8
- 9 X10 minus Y1
- 10 Four times a prime number
- 11 Consecutive digits in ascending order
- 13 Z10 minus Z1

Y Direction

- 1 Mean of X1 and Z10
- 6 Twice X11
- 7 X6 plus Y1
- 8 Fourteen times a prime number
- 12 Z8 reversed

Z Direction

- 1 Three-fifths of Y12
- 2 Z8 plus half of Y8
- 3 Y12 minus X13
- 4 Three-fourths of Z5
- 5 Eighty-two times X13
- 8 X6 minus Y1
- 10 A prime number

Solution:

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