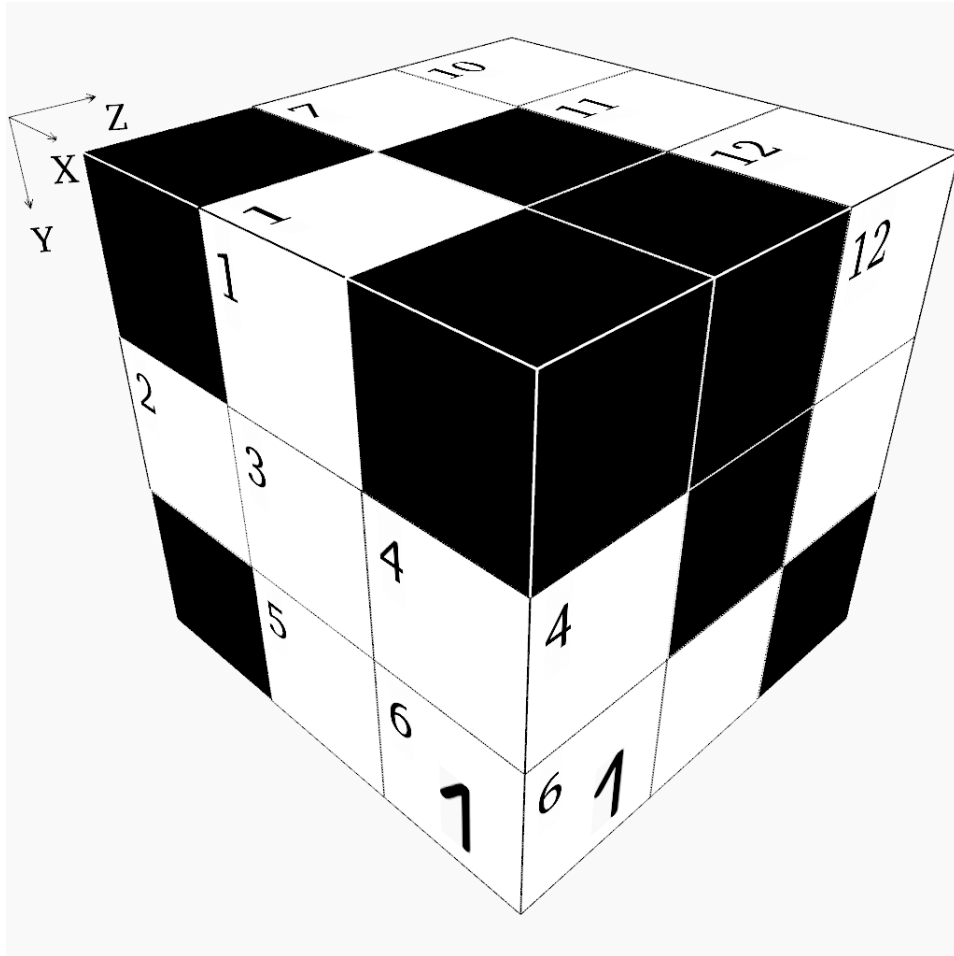


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #37



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		7			10	11	12
2	3	4		8		13		
	5	6	9			14		
		1						

X Direction

- 2 Twice a prime number
- 5 X10 minus half of Y12
- 9 Twice a prime number
- 10 A prime number
- 13 Thirty-eight times Z6
- 14 Digits are the same as first two digits of X9

Y Direction

- 1 Mean of X13 and Z9
- 4 Mean of Y8 and X14
- 8 Consecutive digits in ascending order
- 10 Mean of X9 and Z9
- 11 Four times a prime number
- 12 Eight times Z6

Z Direction

- 3 One less than Y11
- 5 Forty-two times a prime number
- 6 Half of X2, then subtract Z3
- 7 Y1 minus half of Y11
- 9 All digits are the same

Solution:

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