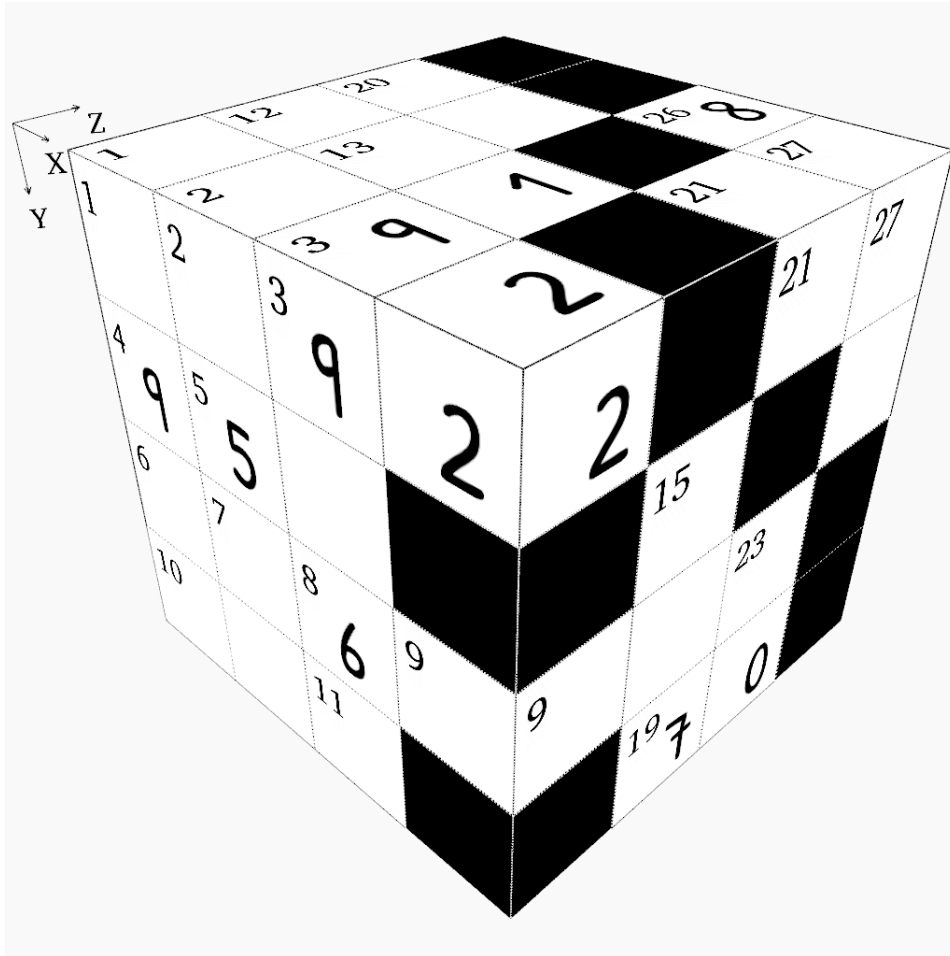


Difficulty: ☆☆☆☆☆

Cube - Beginner Puzzle #15



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	3	9	2	12	13	1		20			21			26	8	27
4	9	5			14			15			22			28	0		
6	7	8	6	9	16		17					23					
10		11					18	7	24	3	8		0	29			

X Direction

- 1 Z10 minus half of Y12
- 4 Half of X16, then subtract X24
- 6 Half of Y1
- 10 Z11 minus Z25
- 12 A prime number
- 14 Z2 minus X18
- 16 Two hundred forty-one more than Y20
- 18 Mean of Y17 and Z25
- 20 Y27 plus Z22
- 24 Forty-three times Y23
- 26 X24 divided by X14
- 28 Twelve times a prime number
- 29 Consecutive digits in descending order

Y Direction

- 1 Seventy-seven times Y27
- 2 Seventeen times Z3
- 3 One hundred eighty less than Z4
- 12 Y20 minus Y28
- 13 X20 plus Y27
- 15 Seven times a square
- 17 Z3 minus X14
- 20 Z4 minus Z7
- 23 Twice X14
- 26 Ten times Z25
- 27 Twice the result of X10 minus Y15
- 28 X12 plus X29

Z Direction

- 1 Mean of X29 and Y26
- 2 X18 plus half of Y23
- 3 Z7 plus X14
- 4 Y20 plus half of X20
- 5 Mean of Z7 and Y27
- 6 Twenty-nine times a square
- 7 Same as Y17
- 8 A square
- 9 A prime number
- 10 Y12 minus Z5
- 11 Y13 plus X12
- 19 X26 minus Z21
- 21 Y26 divided by Z5
- 22 X29 minus Z19
- 25 X6 divided by Z22

Solution:

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