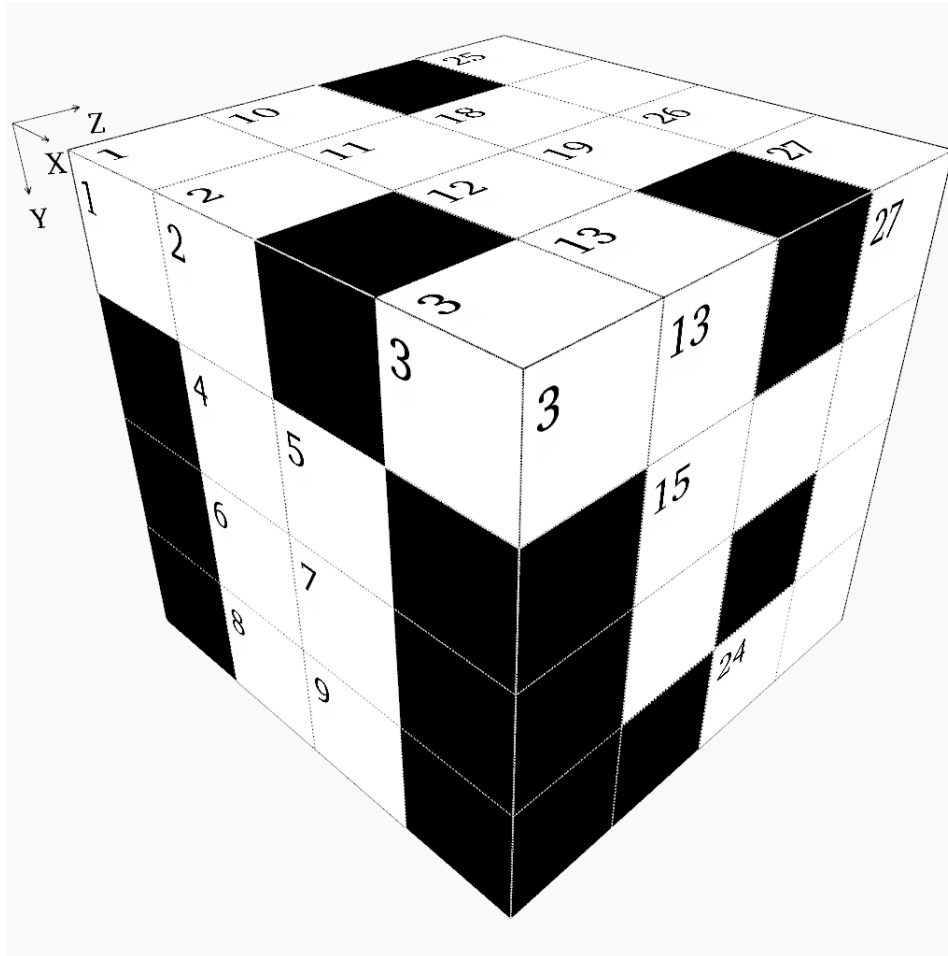


Difficulty: ★★☆☆☆

Cube - Challenging Puzzle #32



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	10	11	12	13		18	19		25		26	27
	4	5		14			15			20				28	
	6	7		16				21	22				29		
	8	9		17				23			24		30		

X Direction

- 1 Z24 minus Z4
- 4 Mean of Z1 and X6
- 6 X30 divided by forty-nine
- 8 Consecutive digits in descending order
- 10 Four times a prime number
- 14 Y19 minus Z17
- 16 X14 minus Z3
- 17 A prime number
- 18 Z6 minus Z15
- 20 X28 minus X1
- 21 Y10 divided by X1
- 23 Sixteen times a prime number
- 25 Thirteen times a prime number
- 28 Z1 plus X1
- 29 Mean of X21 and Z4
- 30 X21 plus Y22

Y Direction

- 2 Y25 plus X16
- 5 Twice a prime number
- 10 Last two digits are the same as Y25
- 11 Consecutive digits unordered
- 12 Three times a prime number
- 13 X17 plus Y22
- 19 Last two digits are the same as last two digits of Y26
- 21 Y19 minus Y2
- 22 A square
- 25 Twice the result of Z5 minus Z7
- 26 Ninety-three times a prime number
- 27 A prime number
- 29 Mean of Y22 and X1

Z Direction

- 1 Mean of Z4 and Z16
- 2 X17 plus half of Y11
- 3 Same as X4
- 4 Y29 minus Z16
- 5 Y12 minus Z17
- 6 Mean of X14 and X6
- 7 Y12 minus X8
- 8 Mean of Y27 and Y26
- 9 Six hundred sixty less than Y26
- 12 Y5 minus half of X8
- 15 A prime number
- 16 A cube
- 17 Three times Y25
- 24 A prime number

Solution:

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