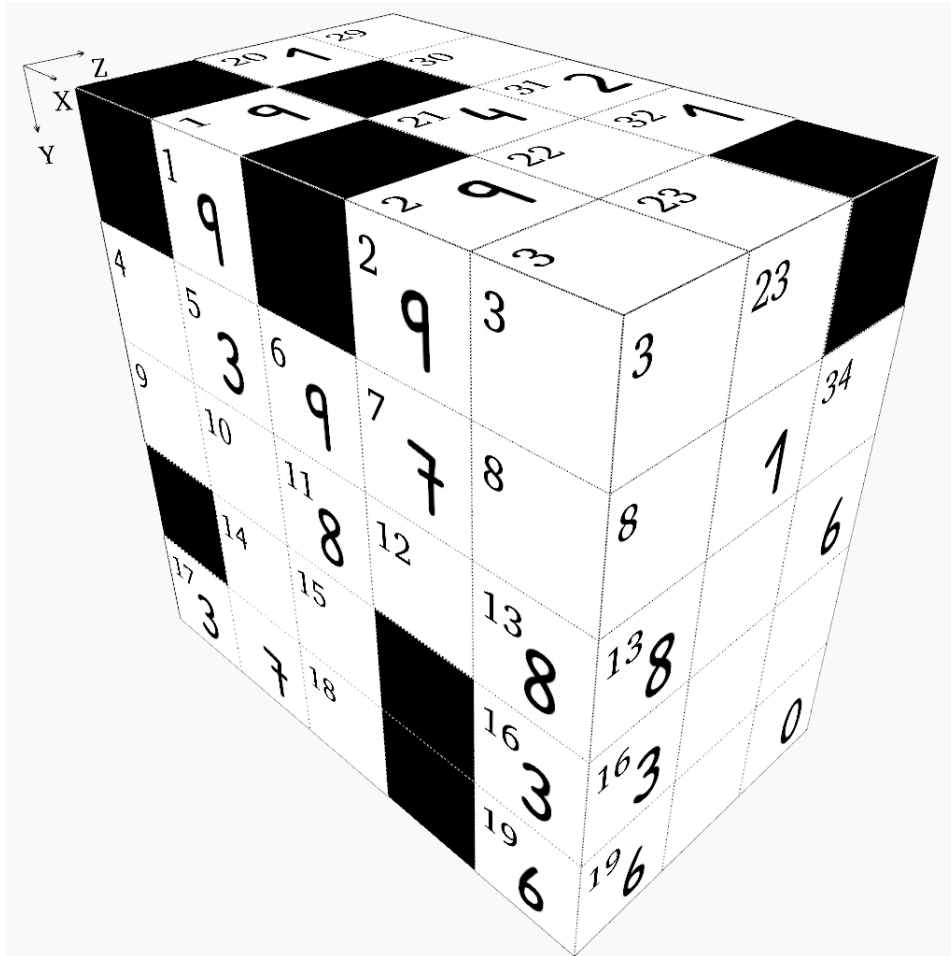


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #38



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 box pictured above and divide it into individual X-Y layers, we will get these planes:

	1		2	3	20		21	22	23	29	30	31	32	
	9		9		1		4					2	1	
4		5	3	6	9	7	7			33	5		4	34
9		10		11	8			13	8	25	1	1		
										26		9	0	7
		14		15				16	3					
17	3	7		18				19	6					
								27		28				
										35			4	6
										36		5		0

X Direction

- 2 Y30 minus Z7
- 4 Last three digits are the same as Z6
- 9 Twice a prime number
- 14 Y29 minus Z10
- 17 Y22 divided by Z9
- 21 All digits are the same
- 24 Thirty-seven times a prime number
- 25 Seven times a prime number
- 26 Seventeen times a prime number
- 27 Y30 plus Z9
- 29 A prime number
- 33 Ninety-six times a prime number
- 35 One hundred sixty-nine more than Z18
- 36 Eleven thousand two hundred eighty-seven less than Y1

Y Direction

- 1 Thirteen times a prime number
- 2 Two hundred thirty-six more than Z7
- 3 Eighty-four times a prime number
- 4 Sum of digits in Z28
- 6 Sixty-five times a prime number
- 21 A prime number
- 22 Nine thousand five hundred ninety-seven less than X33
- 23 Forty-nine times a prime number
- 24 A prime number
- 25 X2 plus X14
- 29 Y23 divided by Z14
- 30 Seventy-six times Y4
- 31 Last two digits are the same as last two digits of Z18
- 32 A prime number
- 34 Ninety times a prime number

Z Direction

- 2 A prime number
- 3 Z12 plus Z28
- 5 Mean of Z14 and Z7
- 6 Y29 plus Z9
- 7 Sixty-seven times Y4
- 8 Four times a prime number
- 9 Mean of Y25 and Z3
- 10 Z11 minus Z20
- 11 Z6 minus Y25
- 12 Twice the result of Z8 minus Z5
- 13 Sixteen times Z28
- 14 A square
- 15 Half of Y3, then subtract Y21
- 16 Half of Z10, then subtract Y32
- 17 Half of Z13, then subtract Y25
- 18 Thirty-five times Y32
- 19 Fifteen times Z21
- 20 Z5 minus X17
- 21 Three-fourths of Z28
- 28 Z20 plus Z12

Solution:

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