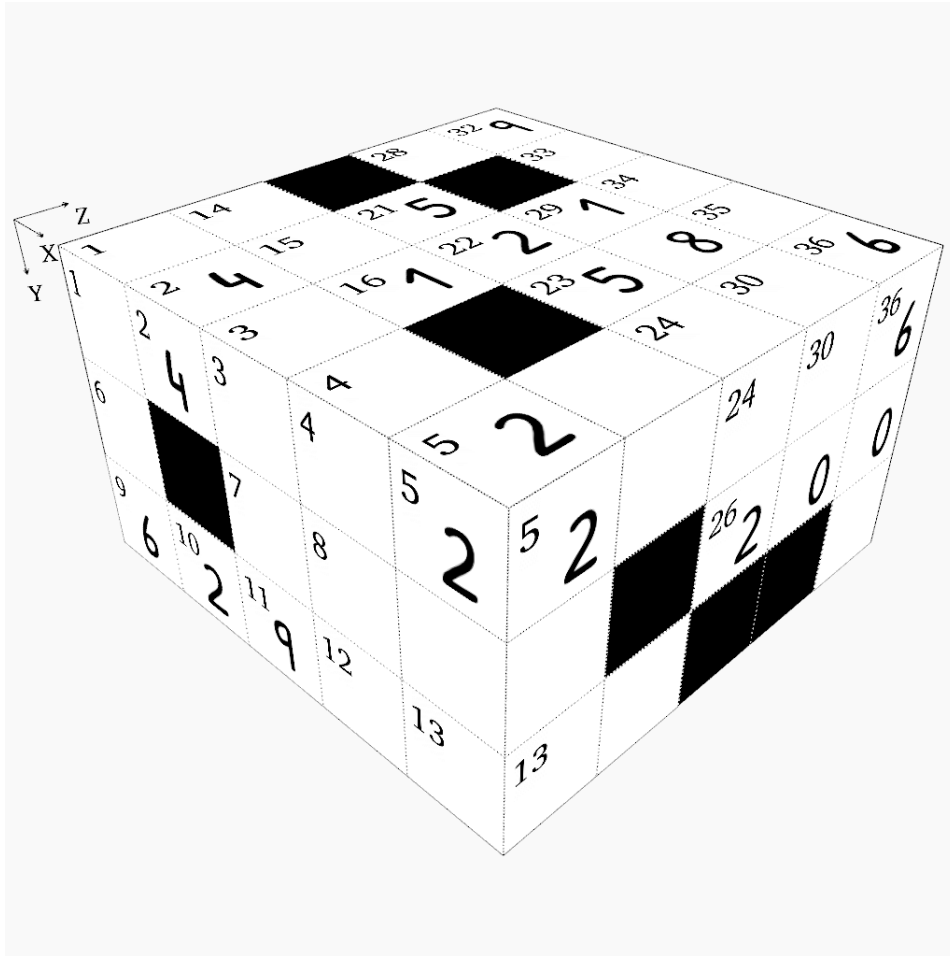


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #35



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	4	5	14	15	16			21	22	23	24
	4			2			1				5	2	5
6			7	8	17	18		19		25			26
					6							4	2
9	10	11	12	13	20					27			
6	2	9				7	0	2			5	4	

28		29		30	32	33	34	35	36
		1	8		9				6
31		2	7		37		7	3	0
				0	38				
					2				

X Direction

- 1 Last two digits are the same as last two digits of X7
- 7 Y33 plus Y35
- 9 Twenty-six times a prime number
- 14 Z12 plus X38
- 17 Fifty-six times a prime number
- 20 Fifteen thousand eight hundred six more than Z3
- 21 Last two digits are the same as last two digits of Z2
- 25 Twenty-six times a prime number
- 27 Thirty-four times a prime number
- 29 Mean of Y28 and Y19
- 31 A prime number
- 32 Seventy-two times a prime number
- 37 Z7 plus half of X27
- 38 A cube

Y Direction

- 1 Z6 plus Z26
- 3 Z13 plus Z2
- 4 Y23 plus Z2
- 5 Half of Y14, then subtract Y22
- 14 X14 plus Y35
- 15 Z2 plus Y19
- 16 Three-fifths of Z26
- 19 Y30 plus Y24
- 21 Thirty-five times a prime number
- 22 Y28 minus Z1
- 23 Thirty-two times a prime number
- 24 Z8 minus Y32
- 28 X20 divided by Y1
- 29 Mean of Y34 and Z10
- 30 Twice the result of X7 minus Y33
- 32 Rearranged digits of X7
- 33 Thirteen times a prime number
- 34 Z23 divided by seven
- 35 Y4 minus Z8
- 36 Twice the result of Z10 plus Z28

Z Direction

- 1 Y33 divided by thirteen
- 2 Y22 plus Z26
- 3 Twice a prime number
- 5 First two digits are the same as Z1
- 6 A square
- 7 A prime number
- 8 Twelve times Y19
- 9 X20 minus Y19
- 10 Eleven times a square
- 11 A prime number
- 12 Eleven times Z13
- 13 Twice the result of Z23 minus Y3
- 18 Z5 minus half of Z3
- 23 Seven times Z31
- 26 Y28 minus Z13
- 28 Y33 divided by thirteen
- 31 Same as Y34

Solution:

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