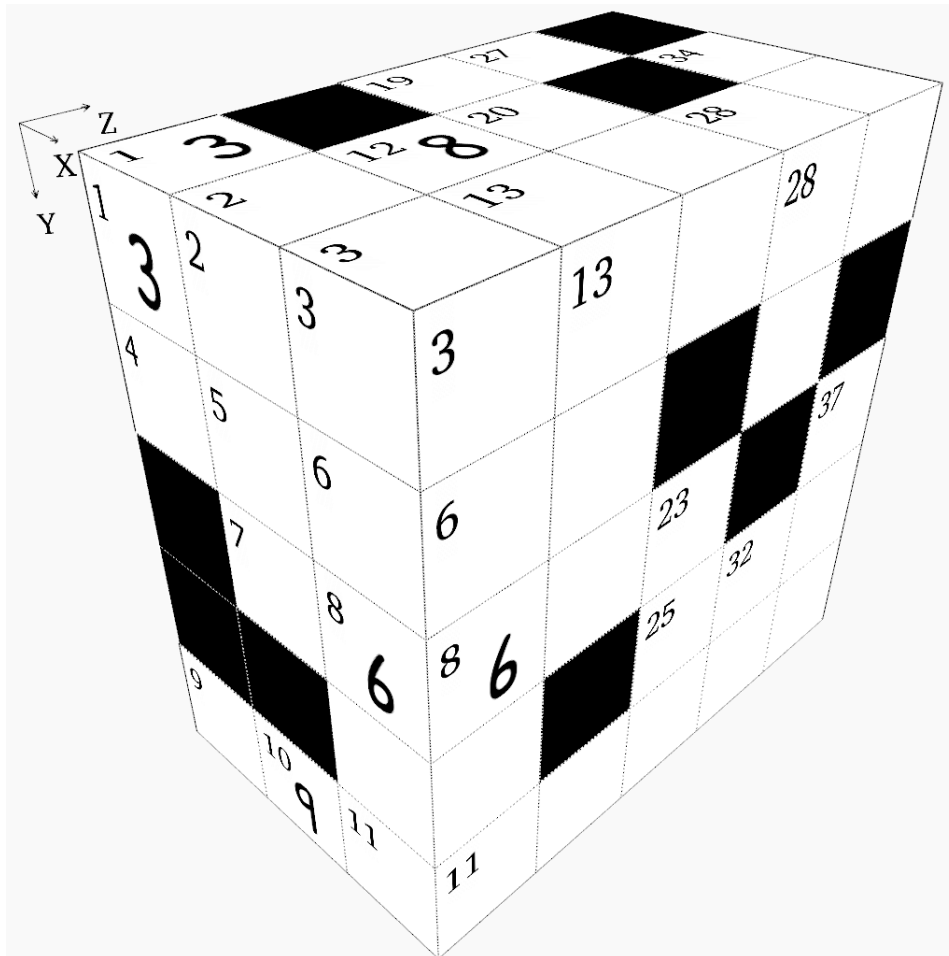


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #28



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 3	2	3		12 8	13	19	20		27		28		34	
4	5	6			14	21	1		29	30		35 8		
	7	8 6		15 1	1	22 9		23				36		37
				16	17		24 4	6	25		31	32		38 4
9	10 9	11			18	26			33	7			39	

X Direction

- 1 A cube
- 4 Y1 plus X35
- 7 Z6 minus Y32
- 9 Mean of X26 and X36
- 12 X14 plus Y27
- 14 Z21 divided by Y15
- 15 X38 plus X21
- 16 Z21 divided by X14
- 18 X31 reversed
- 19 Mean of X1 and X31
- 21 Mean of Y27 and Y37
- 22 Eighty-nine times Z19
- 24 X38 plus X29
- 26 A prime number
- 29 Mean of Z6 and Z21
- 31 X34 minus Z19
- 33 Twice the result of X19 plus Z26
- 34 X18 plus X39
- 35 Twice Z26
- 36 Mean of Z2 and Y23
- 38 Mean of Y28 and X31
- 39 Y2 divided by Z19

Y Direction

- 1 A prime number
- 2 Mean of X35 and Z21
- 3 Seven thousand three hundred sixty more than Z3
- 12 A prime number
- 13 Z21 minus X24
- 15 Z6 minus Y35
- 19 Eight times a prime number
- 20 Thirty-four times a prime number
- 23 X22 minus half of X34
- 27 Z6 divided by seven
- 28 Y32 plus Y1
- 30 Seven times a prime number
- 32 Y1 minus Z15
- 34 A prime number
- 35 Z6 minus X16
- 37 X7 plus X38

Z Direction

- 2 X21 plus Y2
- 3 Ninety-four times X1
- 5 Mean of Z3 and X18
- 6 Seven times X18
- 7 Y37 times Z8
- 8 X36 minus X12
- 10 A prime number
- 11 Eight times a prime number
- 15 Y2 divided by twenty-two
- 16 Same as X18
- 17 Twelve times a prime number
- 19 Same as Y15
- 21 Z19 times X14
- 25 A cube
- 26 Y35 minus Y28

Solution:

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