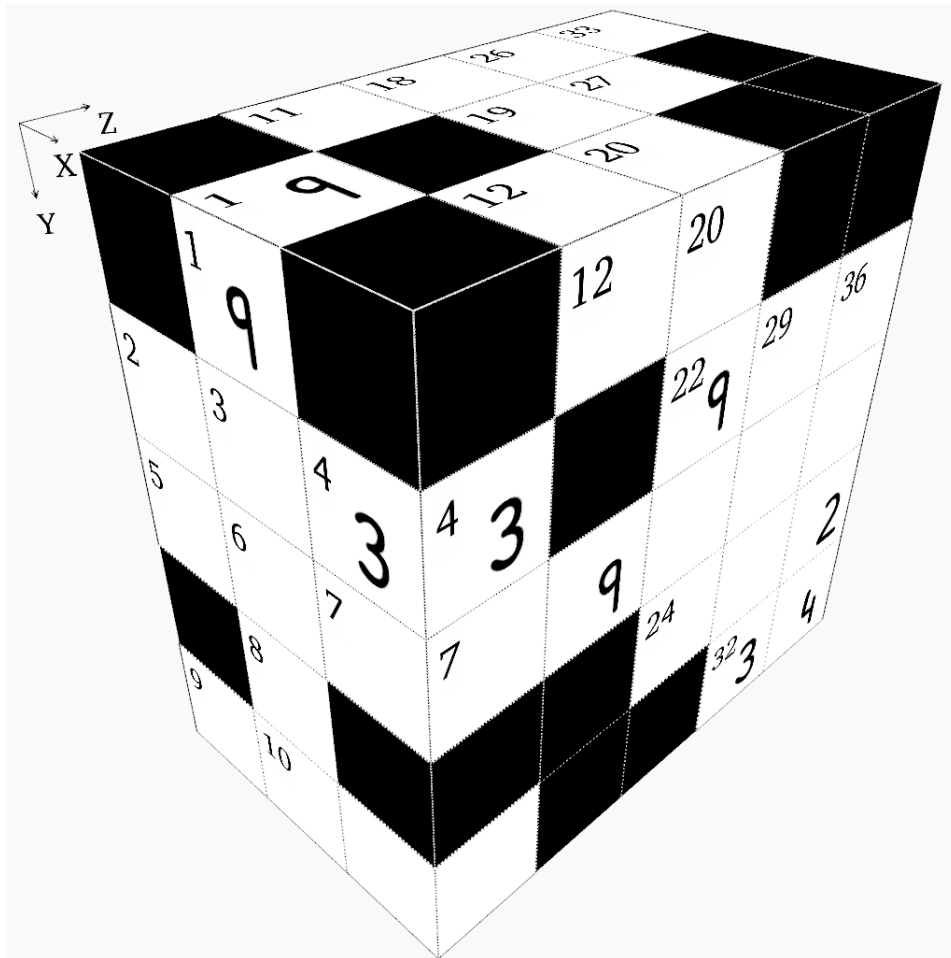


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #4



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

X Direction

- 2 Mean of Y38 and Y27
- 5 Mean of Z22 and X2
- 9 Fifty times Z12
- 13 Z8 minus Y38
- 15 Z9 minus X17
- 16 Mean of X17 and Z19
- 17 Mean of Z19 and X38
- 18 X31 plus half of Y19
- 21 A square
- 23 X28 plus half of X26
- 25 Y35 divided by ninety-five
- 26 Z8 plus Y38
- 28 Mean of X21 and X30
- 30 Mean of X23 and X25
- 31 X28 minus X17
- 34 Seven times X31
- 37 Z32 plus Y38
- 38 Z22 minus X15
- 39 Sixteen times a prime number

Y Direction

- 1 Eighteen thousand nine hundred sixty-six more than Y11
- 2 A square
- 4 Mean of X37 and Z12
- 11 Last three digits are the same as X15
- 14 X17 times X16
- 18 Two thousand four hundred fifty more than Z3
- 19 Twenty-eight times a prime number
- 20 Twenty-three times a prime number
- 26 Three hundred fifty-two less than Z11
- 27 X18 minus Z32
- 29 Y27 plus X9
- 33 X21 divided by Y38
- 35 First two digits are the same as X26
- 36 Four times a prime number
- 38 X16 minus X25

Z Direction

- 2 Mean of Y18 and Y26
- 3 Eight thousand eight hundred twenty more than Z7
- 5 A prime number
- 6 Last two digits are the same as Z32
- 7 A prime number
- 8 X25 minus Z12
- 9 Sixty-nine times Y38
- 10 Last three digits are the same as X9
- 11 Y35 plus Z8
- 12 X15 divided by X37
- 16 A prime number
- 19 Mean of Z12 and X28
- 22 X9 plus Z8
- 24 X25 plus half of X13
- 32 X37 minus Y33

Solution:

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