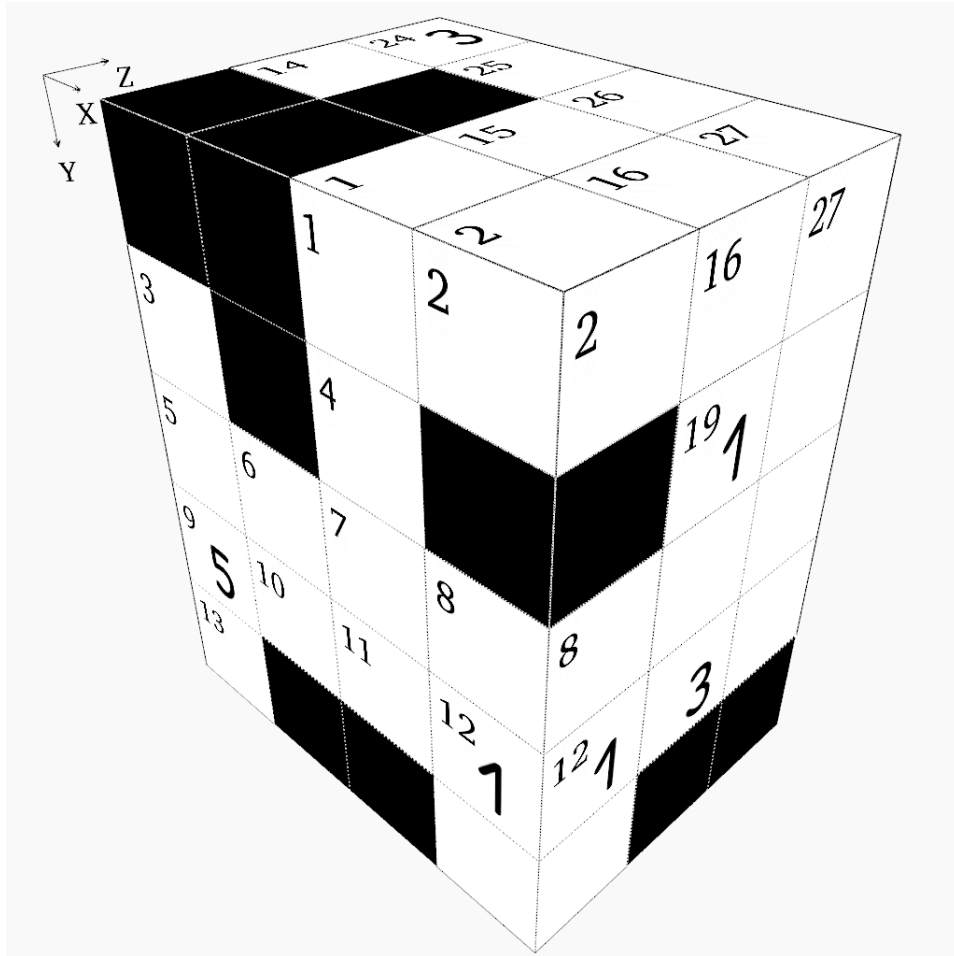


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #21



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	14		15	16	24	25	26	27
3		4		17	18		19	3			
5	6	7	8			20		28		8	
9	5	10	11	12							
13					21		3		29	30	1
				22	23			31		9	

X Direction

- 1** Mean of Z19 and Y26
- 5** Seventy-seven times a prime number
- 9** Thirty-one times a prime number
- 15** Mean of X22 and Y29
- 17** A prime number
- 20** Z2 divided by Y30
- 21** Z19 plus X31
- 22** Y6 plus Y29
- 24** Twice the result of Y1 minus Y3
- 28** Seventy-four times Y29
- 29** Z14 plus Z18
- 31** A square

Y Direction

- 1** Forty-one times a prime number
- 3** Consecutive digits unordered
- 6** Y21 plus X15
- 8** Twice the result of X29 plus X15
- 14** Eight times X15
- 15** Ninety-five more than X5
- 16** Three times a prime number
- 21** X22 divided by six
- 24** Z13 minus Y6
- 25** X9 divided by Z11
- 26** X15 plus X20
- 27** Fourteen times a prime number
- 29** A square
- 30** Mean of Z23 and Y21

Z Direction

- 1** Twenty-two more than Z5
- 2** Thirty-four times a prime number
- 3** A prime number
- 4** Three times Y6
- 5** Seventeen times a square
- 7** X20 reversed
- 8** X31 plus half of Y14
- 10** Thirteen times a prime number
- 11** Mean of X1 and Y8
- 12** Z4 minus X20
- 13** Y14 plus Y30
- 14** Z19 plus Y30
- 18** A square
- 19** Z4 divided by Y21
- 23** Mean of Y30 and Z14

Solution:

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