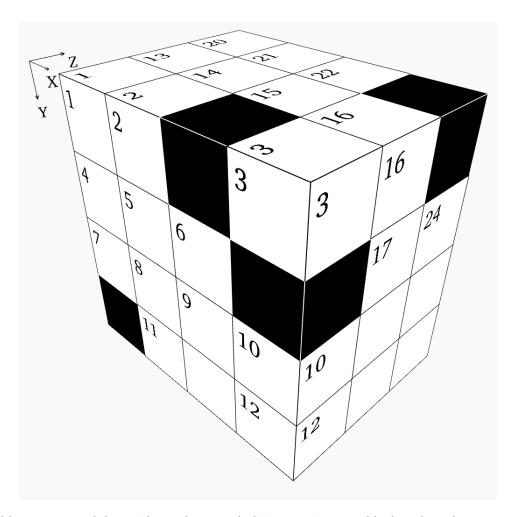


Box - Challenging Puzzle #74



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	13	14	15	16	20	21	22	
4	5	6					17	23			24
7	8	9	10	18				25			
	11		12	19						26	
	111		12	19						120	

X Direction

- **1** Y1 minus Z3
- **4** Seven times a prime number
- **7** Fifteen more than Y20
- 11 Rearranged digits of Z1
- 13 Consecutive digits unordered
- 18 Mean of Y2 and X7
- **19** Z15 minus Y18
- 20 Y1 reversed
- **23** One thousand four hundred fourteen more than Y14
- 25 Twenty-six times a prime number
- 26 Z5 divided by Y18

Y Direction

- 1 X20 reversed
- 2 One thousand nine hundred ninety-one 2 Half of X23, then subtract X25 less than X13
- 6 Six less than X4
- 10 X26 plus X19
- **14** Eighty-four times Z11
- **16** Nine hundred sixty-eight more than X23
- **18** X1 reversed
- **20** Y2 minus X11
- **21** X18 divided by fifty-five
- **22** A prime number
- **24** Mean of Z15 and X11

Z Direction

- **1** Z10 minus Y10
- 3 Nine times X26
- **5** Its digits total Z17
- **7** A prime number
- **8** Four times Z10
- 9 X18 divided by X26
- **10** Twice a prime number
- **11** Mean of Y18 and Z3
- 12 X4 minus half of Z11
- **15** Z1 minus Y21
- **17** Mean of Z19 and X26
- 19 Z15 reversed

Solution:

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