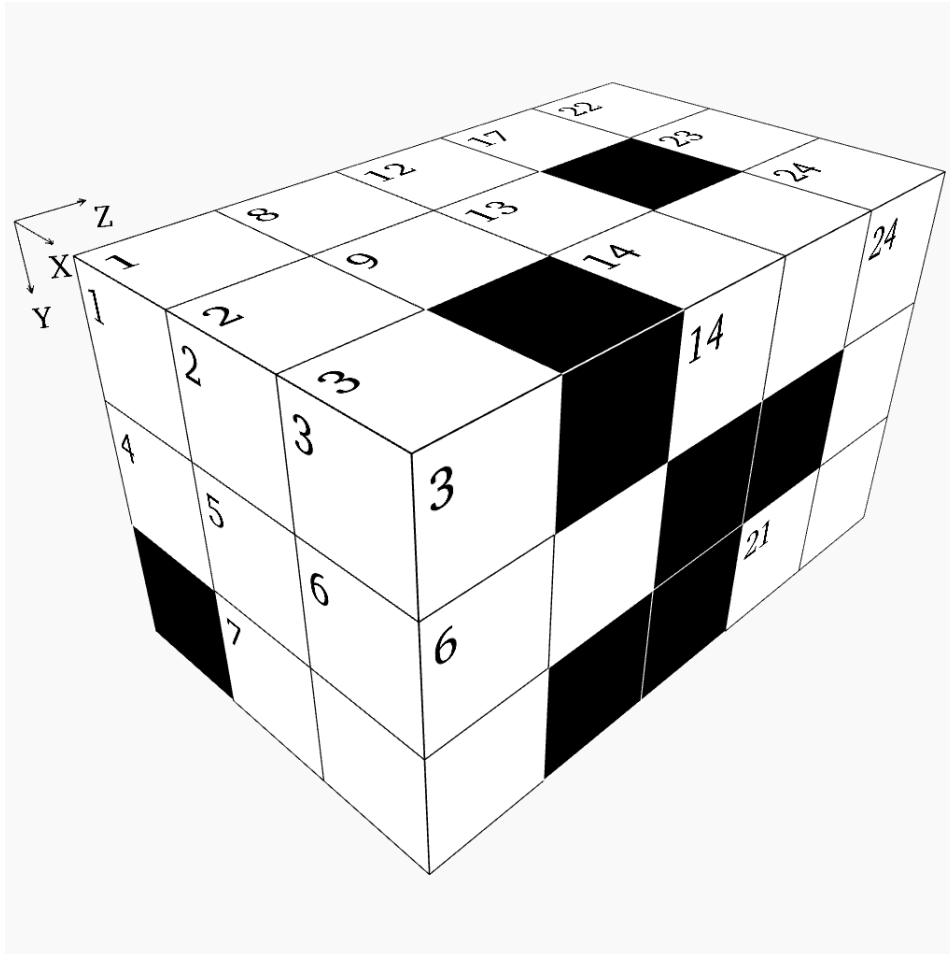


Box - Intermediate Puzzle #16



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

X Direction

- 1 X11 times Y1
- 4 A prime number
- 7 Y9 divided by seven
- 8 Z21 divided by seven
- 10 Mean of Y9 and X22
- 11 X1 divided by X8
- 12 X25 plus Y13
- 15 X1 divided by X8
- 16 Mean of Y1 and Y8
- 18 Mean of X7 and Y24
- 20 Y17 reversed
- 22 Mean of X25 and Y8
- 25 Three times X26
- 26 Z6 minus X11

Y Direction

- 1 Same as Y22
- 2 Y3 plus X16
- 3 Three times a prime number
- 8 Half of Y17, then subtract Z14
- 9 Rearranged digits of Y13
- 12 Twice the result of X25 plus X4
- 13 Mean of X20 and Y23
- 17 X20 reversed
- 19 Mean of X7 and X25
- 22 Mean of Y1 and X8
- 23 Y12 minus X22
- 24 X7 plus Y19

Z Direction

- 1 First two digits are the same as first two digits of Y8
- 2 Z6 times X8
- 4 A prime number
- 5 Twenty-one times a prime number
- 6 Z2 divided by Y22
- 7 Fifteen times a prime number
- 11 Mean of X26 and Z14
- 14 A prime number
- 21 Mean of X11 and X4

Solution:

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