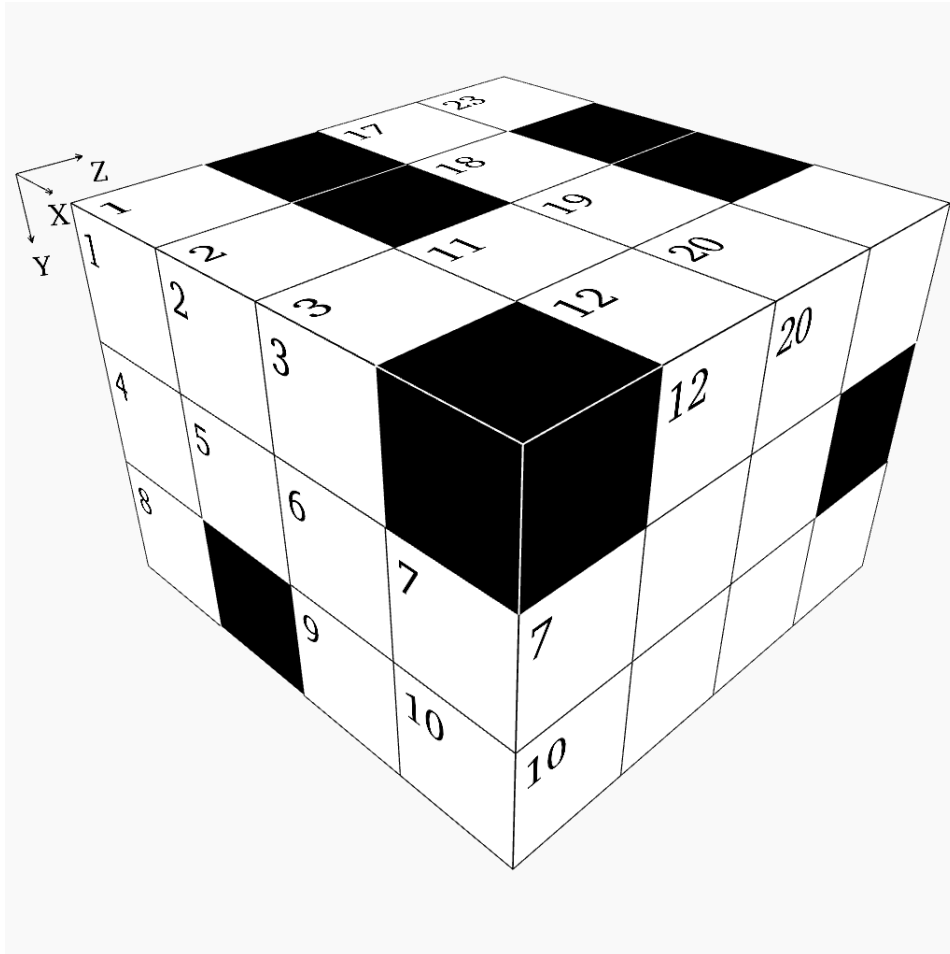


Difficulty: ★★☆☆☆

Box - Challenging Puzzle #36



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

X Direction

- 1 Y23 minus Y13
- 4 Eight times a prime number
- 9 X1 minus Y19
- 11 Y19 divided by seventy-two
- 13 Nine hundred seventy-nine less than Z5
- 15 Six times a prime number
- 17 Twice the result of Z10 minus X13
- 21 A prime number
- 22 Half of X4, then subtract Y1
- 24 Z5 divided by Y25
- 26 Mean of X9 and Y13

Y Direction

- 1 Y23 minus Y7
- 2 Same as X9
- 3 Y11 minus half of Z16
- 7 Half of Y12
- 11 Rearranged digits of Z3
- 12 Y20 reversed
- 13 Y23 minus Y20
- 14 Z16 reversed
- 17 Twenty-one times X11
- 18 A square
- 19 X1 minus Y2
- 20 Y12 reversed
- 23 Four times a prime number
- 25 Same as Z16

Z Direction

- 3 Three times Y2
- 4 A prime number
- 5 X24 times Z16
- 6 A prime number
- 7 Three times a prime number
- 8 Four times a prime number
- 9 Six times a prime number
- 10 Forty-four times a prime number
- 12 Twice the result of Y17 minus Y12
- 16 Y12 minus X26
- 17 A prime number

Solution:

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