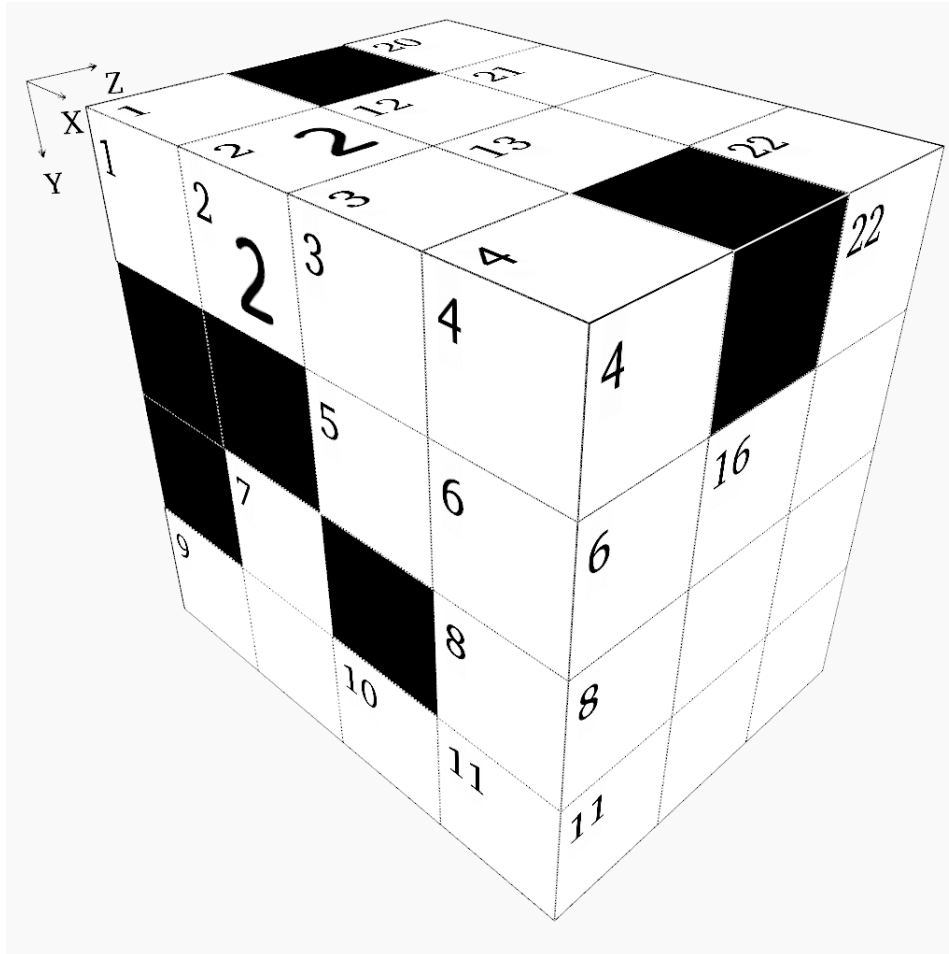


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #46



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 2	3	4		12	13		20	21		22
		5	6	14	15		16	23			
	7		8	17		18 6		24		25	
9		10	11			19		26			

X Direction

- 1 Twice a prime number
- 5 X19 divided by six
- 9 Mean of Y4 and Z6
- 12 A prime number
- 14 Thirty-eight times a square
- 17 Twice a prime number
- 19 Y20 divided by twenty-seven
- 20 Y22 minus Y16
- 23 Ten times a prime number
- 24 Forty-seven times a prime number
- 26 A prime number

Y Direction

- 3 Mean of X19 and Y25
- 4 Nine hundred thirty-four less than X17
- 7 Z15 plus X5
- 12 Five times Y25
- 13 Mean of X1 and Z17
- 14 Z8 minus Y3
- 16 Y14 plus X23
- 20 X14 minus Z15
- 21 Ninety-one times a prime number
- 22 A prime number
- 25 X9 divided by twenty-eight

Z Direction

- 2 X26 minus half of X17
- 3 Sixty-five times X5
- 5 A square
- 6 Eight times Z5
- 7 Nine times a prime number
- 8 A prime number
- 9 Rearranged digits of Y16
- 10 X9 minus X14
- 11 Fifty-one times Z14
- 14 Y3 reversed
- 15 Y14 minus Y25
- 17 Z6 minus X23
- 18 Y21 divided by Y7

Solution:

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