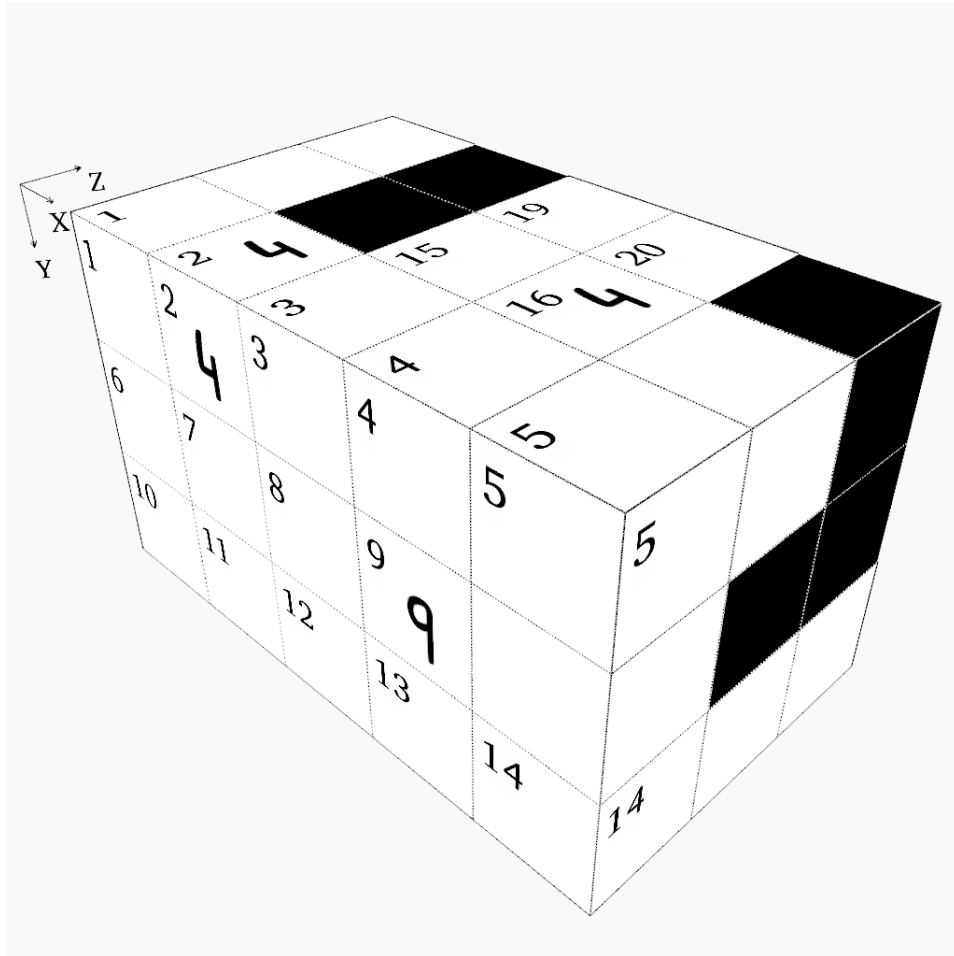


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #49



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 4	3	4	5			15	16 4				19	20	
6	7	8	9 9				17		4			21		
10	11	12	13	14	18							22 2		1

X Direction

- 1 Seven times a prime number
- 6 Thirty-six times a prime number
- 10 Mean of X1 and Z4
- 15 X17 minus Y1
- 17 Twenty-two times a prime number
- 18 First, third, and fifth digits are the same
- 19 A prime number
- 21 Ten times a prime number
- 22 Five times a prime number

Y Direction

- 1 Mean of Y16 and X19
- 2 Four times a prime number
- 3 X15 plus Y16
- 4 Z5 plus Y5
- 5 Its digits total Y21
- 15 Y20 minus Y5
- 16 Mean of Z1 and Z12
- 17 Six times a prime number
- 19 Eleven times a square
- 20 Seventeen times a prime number
- 21 Consecutive digits in ascending order

Z Direction

- 1 X21 plus Y17
- 3 Seven times Z5
- 4 Seven times a prime number
- 5 A prime number
- 7 Eighty-eight more than Y16
- 8 A prime number
- 9 Twice the result of Y2 plus Z10
- 10 Y17 minus Y21
- 11 Mean of X17 and Y17
- 12 Twice the result of X15 plus Z1
- 13 Mean of Z14 and Z8
- 14 Thirty-five times a prime number

Solution:

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