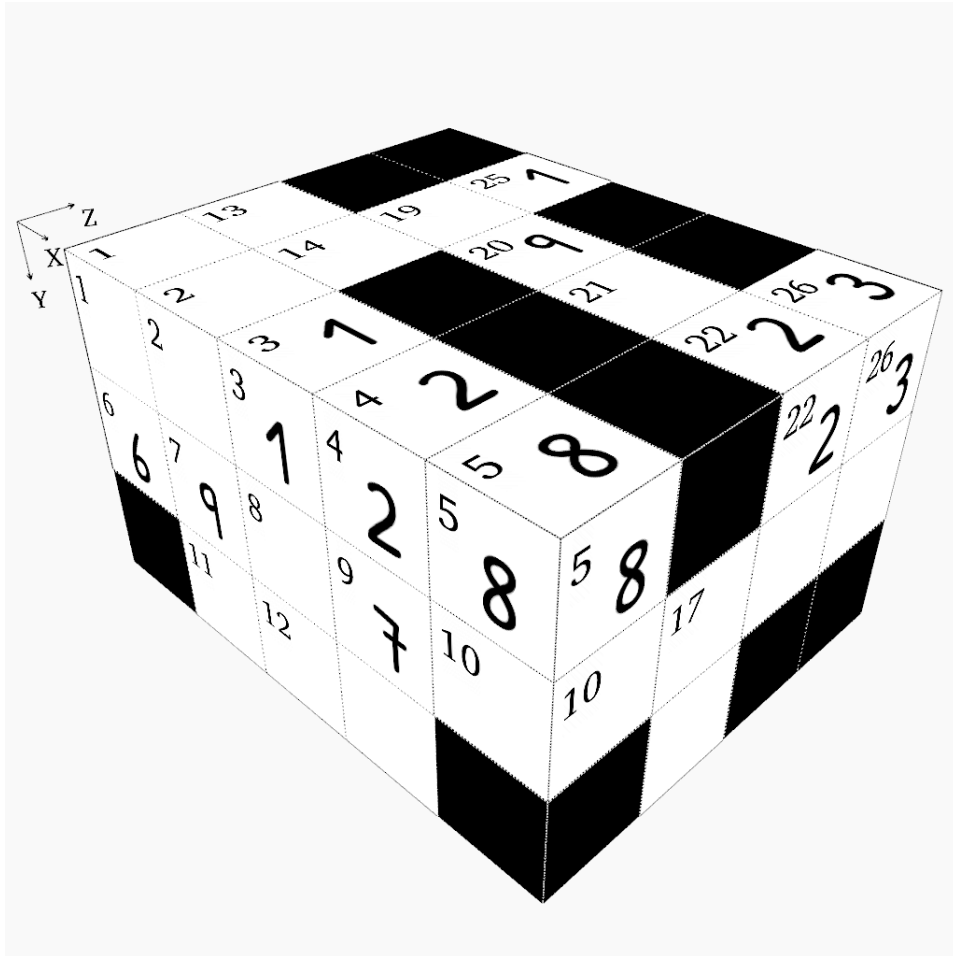


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #50



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	4	5	13	14					19	20	21	22
		1	2	8								9		2
6	7	8	9	10	15		16		17	23				
			7											
	11	12			18						24			
						25	1			26	3			
					27			28	29					
					30									

X Direction

- 1 Twenty-four times a prime number
- 6 Twenty-one thousand nine hundred fifty-five less than X1
- 11 First two digits are the same as Z1
- 13 Z22 plus Y26
- 15 Consecutive digits unordered
- 18 Four times a prime number
- 19 Twice a square
- 23 Five hundred forty more than X15
- 24 Y13 divided by Y22
- 27 Seventy-two times a prime number
- 30 Ten times a prime number

Y Direction

- 1 Z6 divided by Y27
- 2 Z8 minus Y20
- 3 Four times X24
- 4 Sixteen times a prime number
- 5 Y2 minus Y3
- 13 Y17 times X24
- 14 A prime number
- 16 X1 divided by Z9
- 17 Y5 minus X13
- 19 Z2 minus Y20
- 20 Fifty-one times a prime number
- 21 Y13 divided by Y17
- 22 Y27 divided by three
- 25 Half of Y4, then subtract Z22
- 26 Y5 reversed
- 27 Three times Y17
- 28 A square
- 29 Eight times a prime number

Z Direction

- 1 Eight times Y16
- 2 X11 plus Y14
- 6 Z1 times Y27
- 7 Nine times a prime number
- 8 Sixteen times a prime number
- 9 Twice a prime number
- 10 X15 minus half of X27
- 11 A prime number
- 12 X30 minus half of Y26
- 22 A prime number

Solution:

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