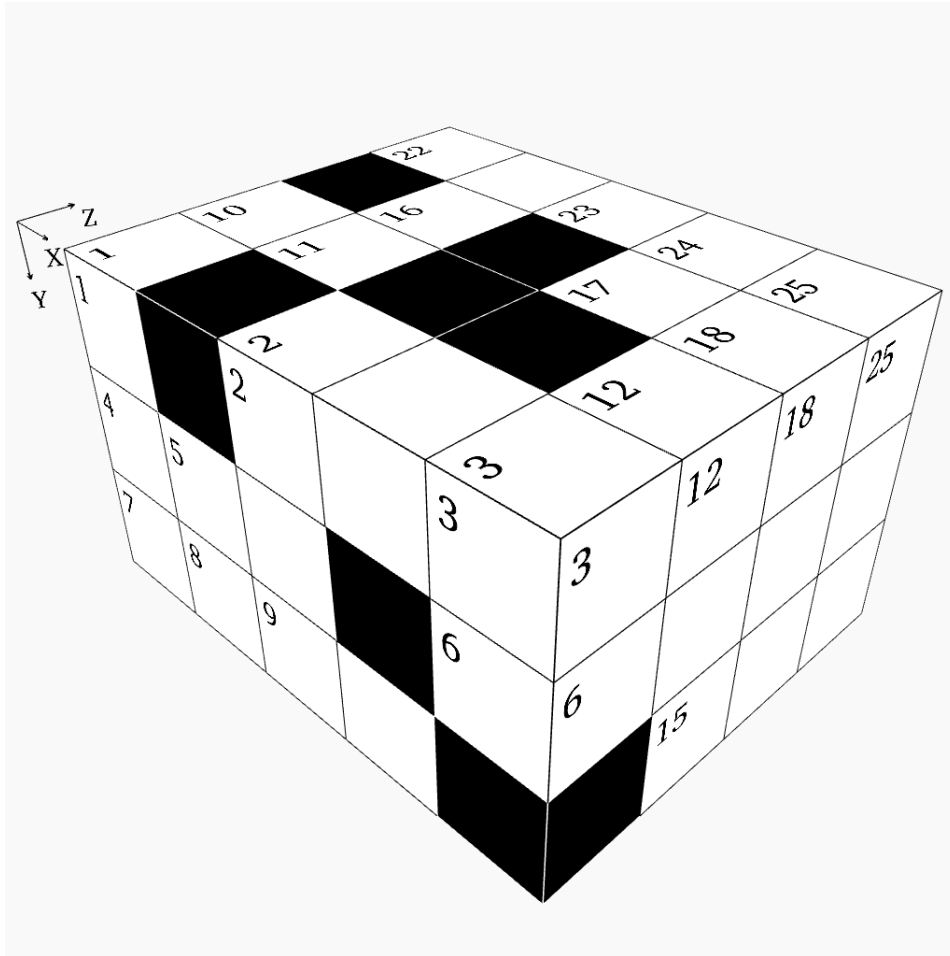Difficulty: ★★☆☆☆

Box - Challenging Puzzle #27

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:

X Direction

2 Y3 plus Y12
4 Eighteen times Y5
7 A palindrome
10 Y25 minus Y19
13 X21 divided by twenty
14 Z13 minus Y19
17 Half of Z19, then subtract X13
19 Last two digits are the same as last two digits of Y18
21 Mean of Z15 and Z13
22 A prime number
26 Y3 plus Y20
27 Mean of Y11 and X14

Y Direction

1 Z11 minus Y25
2 Z15 minus X2
3 Half of Z5, then subtract X26
5 Mean of Z21 and Z17
11 A prime number
12 Mean of Z15 and Y17
16 X21 minus Y25
17 Z21 minus Y5
18 X2 plus Y2
19 Mean of Y5 and X10
20 Y22 minus Z17
22 X7 divided by fifty-five
23 Eleven times a prime number
24 Last two digits are the same as last two digits of Y22
25 Rearranged digits of X26

Z Direction

1 A prime number
3 Nine times a prime number
5 Y2 plus X17
6 Twice a prime number
8 Ninety-three times Y17
9 Thirty-one times a prime number
11 Mean of Z8 and Z15
13 A square
15 Five times Z13
17 Y5 minus Y17
19 Two-thirds of Y20
20 X26 minus X13
21 X21 minus half of X4

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