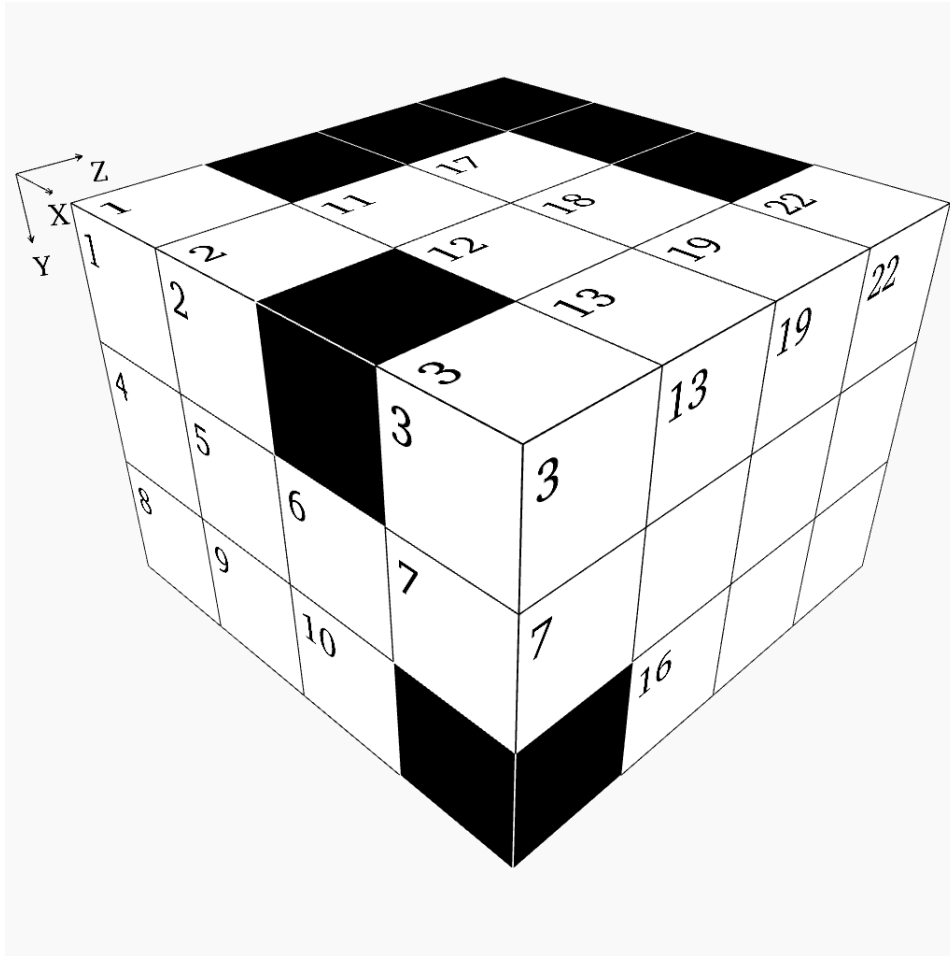# Box - Challenging Puzzle #6

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	6	7
8	9	10	

	11	12	13
14			
15		16	

	17	18	19
20			
	21		

			22
23	24	25	
26			

X Direction

1 Y11 minus Y22
4 Ninety-one times a prime number
8 Z10 divided by Y24
11 X14 minus Y17
14 Y11 plus Y12
15 A prime number
17 Twice the result of Z4 minus Y19
20 Mean of Z3 and Z9
21 Y19 divided by twenty-one
23 A prime number
26 Three times a prime number

Y Direction

1 Four times a prime number
2 Three times a prime number
3 Y6 plus Y14
6 Y23 minus Y14
11 X11 minus Y14
12 Mean of Y2 and Y20
13 X14 minus Z12
14 Y25 minus Y20
17 Y12 minus Y14
18 A prime number
19 Seven times Y17
20 A square
22 Mean of X4 and Y20
23 Same as Y3
24 Y17 minus Z9
25 Twice the result of X14 minus Y13

Z Direction

2 Rearranged digits of X11
3 Twice the result of X20 minus Y3
4 A prime number
5 A prime number
6 Mean of Z3 and Z9
7 Nineteen times a prime number
8 Three times a prime number
9 X17 minus Y11
10 Seventy-two times a prime number
12 X21 minus Y24
16 A prime number

Solution:

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