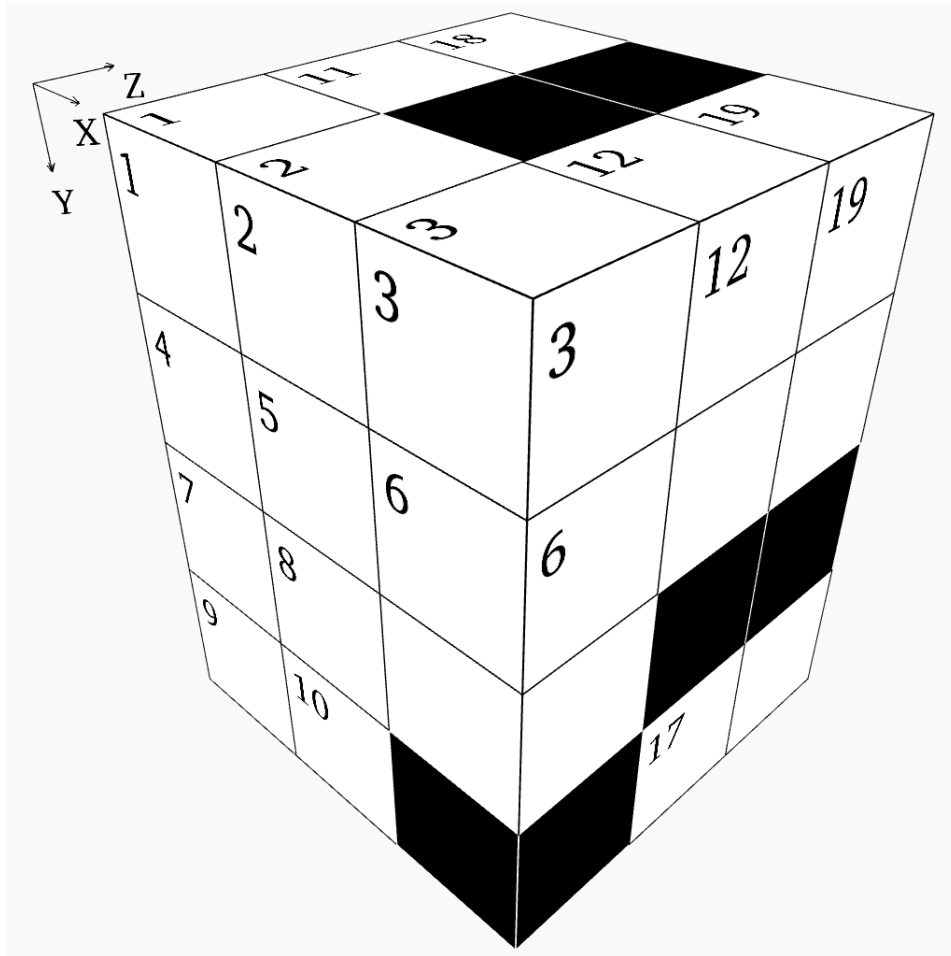


Box - Intermediate Puzzle #54



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	11		12	18		19
4	5	6	13	14				
7	8		15			20		
9	10		16		17			

X Direction

- 1 A prime number
- 4 X16 minus Z17
- 7 Y2 divided by X9
- 9 Y14 divided by twenty-eight
- 13 Mean of Y19 and Z8
- 15 Four times a prime number
- 16 A prime number
- 20 Z5 divided by three

Y Direction

- 1 Sixteen times a prime number
- 2 Fifty-two times Z10
- 3 Rearranged digits of Z3
- 11 Seven times a prime number
- 12 X15 minus Z17
- 14 Fifty-six times a prime number
- 18 Y11 plus X20
- 19 X1 minus Y14

Z Direction

- 1 Twice the result of Z4 plus Y12
- 3 A square
- 4 Twelve times X9
- 5 Z10 minus Y19
- 6 Mean of X13 and Z17
- 7 A prime number
- 8 Seven times a prime number
- 9 Eight times a prime number
- 10 Two-fifths of X13
- 17 Consecutive digits in descending order

Solution:

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