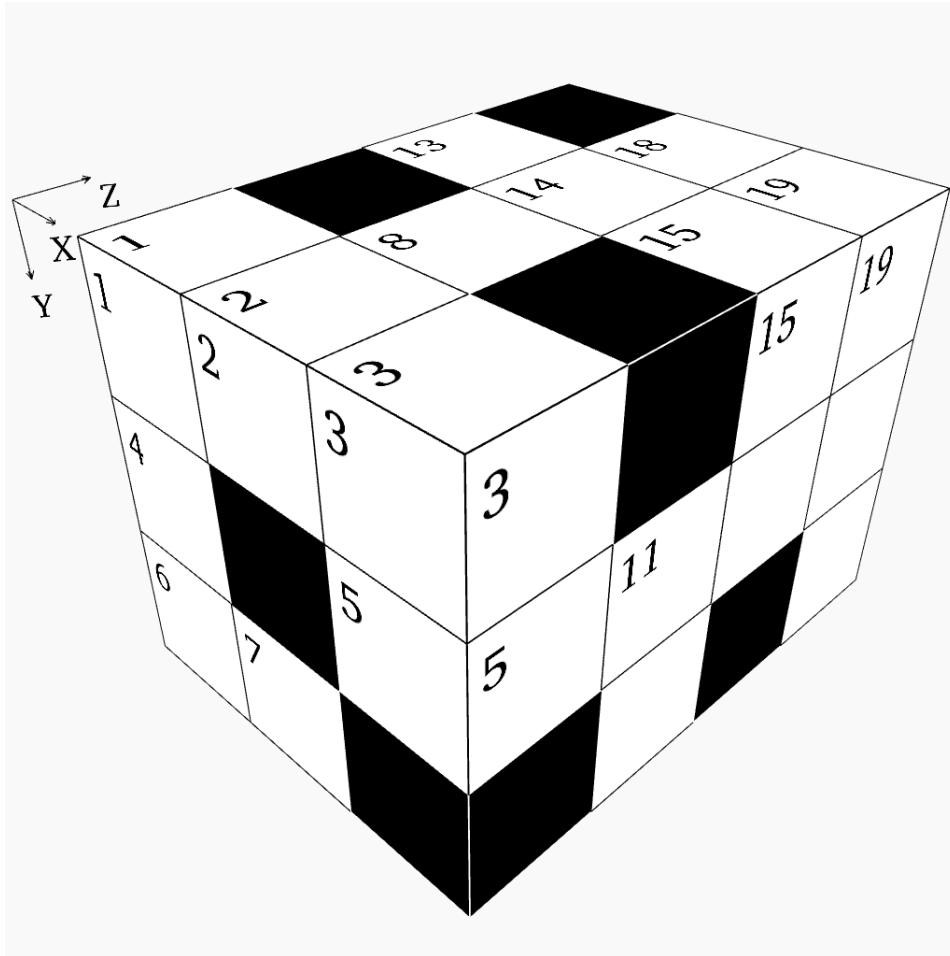


Box - Challenging Puzzle #33



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

X Direction

- 1 Consecutive digits unordered
- 6 Y19 divided by twenty-seven
- 9 Y1 minus half of Y19
- 12 Four times a prime number
- 13 Three times a prime number
- 16 Forty-four times a prime number
- 17 Six times a prime number
- 18 All digits are the same
- 20 Z17 times X6

Y Direction

- 1 Y14 minus Y3
- 3 A prime number
- 8 A prime number
- 11 Same as X12
- 13 A prime number
- 14 Twice the result of X1 minus Y13
- 15 A square
- 18 A prime number
- 19 A square
- 20 X20 divided by X6

Z Direction

- 2 Z5 minus Y8
- 4 A prime number
- 5 Thirty-four times a prime number
- 7 Ninety-three less than Y13
- 10 Eleven times a prime number
- 15 Half of X12, then subtract X18
- 17 Z15 reversed

Solution:

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