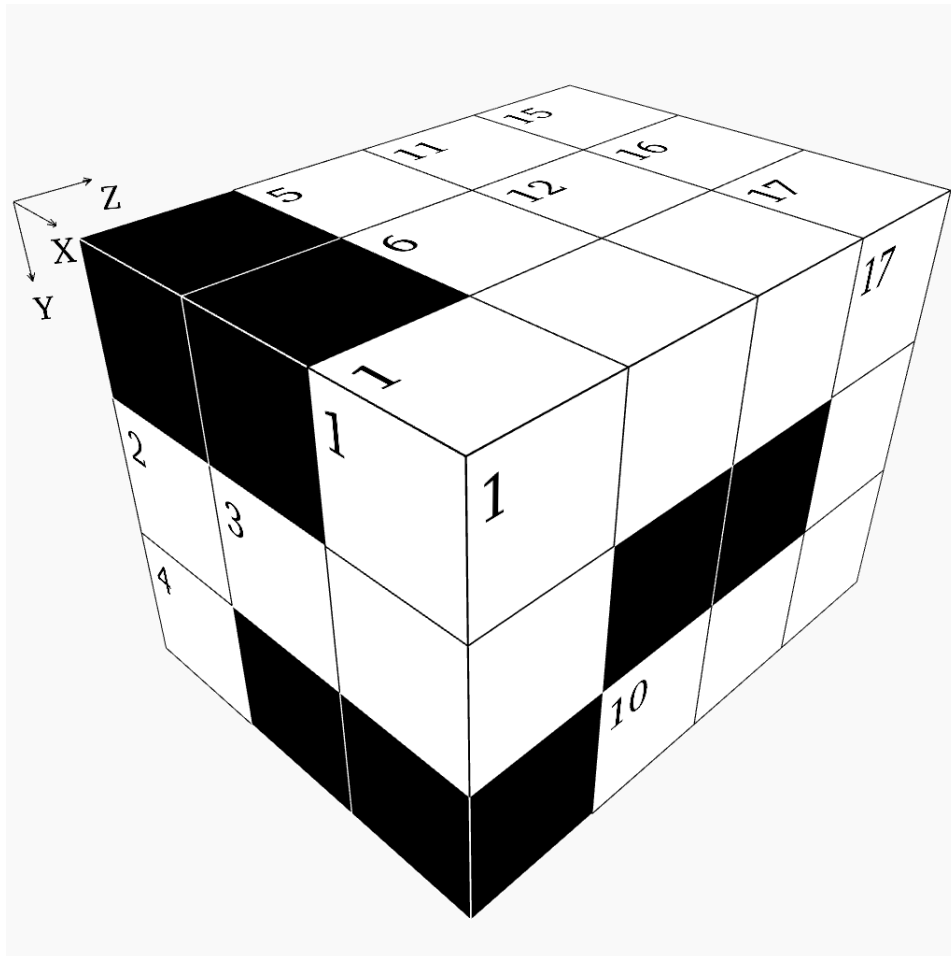


Box - Intermediate Puzzle #41



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	5	6		11	12		15	16	17
2	3		7			13			18		
4			8	9	10	14					

X Direction

- 2 A prime number
- 5 Z1 minus Z3
- 7 Y12 divided by twenty-four
- 8 A prime number
- 11 All digits are the same
- 13 Z9 reversed
- 14 One hundred fifty-four less than X11
- 15 A prime number
- 18 A prime number

Y Direction

- 1 Y11 divided by Y15
- 2 Y11 divided by Y1
- 5 Mean of X14 and X7
- 6 Twice a prime number
- 11 Rearranged digits of Y12
- 12 Z2 minus half of Y17
- 15 Z9 divided by seven
- 16 Fifteen more than Y1
- 17 Four times a prime number

Z Direction

- 1 Fifty-one times a prime number
- 2 Y5 plus X11
- 3 Sixteen times a prime number
- 4 Z10 minus Y6
- 5 X13 plus Y5
- 6 Same as X15
- 9 Twice the result of X18 minus X15
- 10 Four times a prime number

Solution:

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