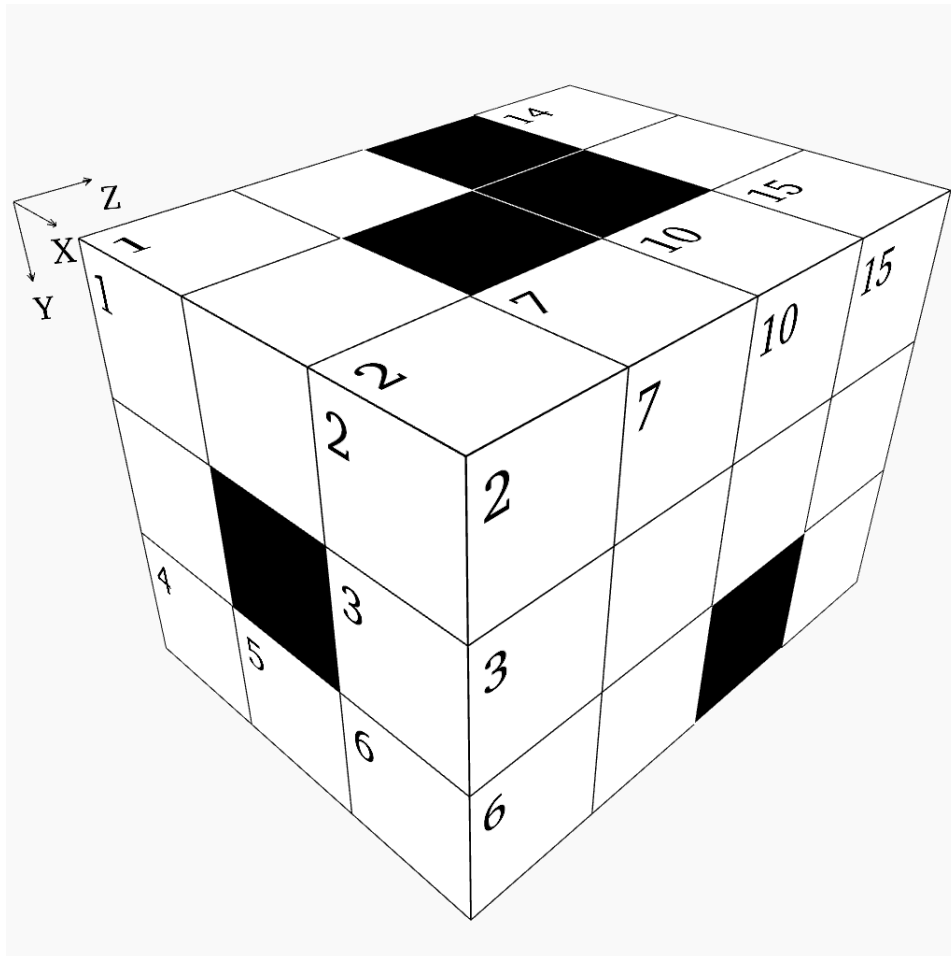


Box - Intermediate Puzzle #51



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

X Direction

- 1 A square
- 4 Mean of Y14 and Z8
- 8 Mean of Y8 and Z8
- 9 Five times Y2
- 11 Y14 plus X14
- 13 Eight times Z8
- 14 Five times a prime number
- 16 Nine times a prime number

Y Direction

- 1 X8 plus X4
- 2 Z6 plus half of X13
- 7 X8 plus Y15
- 8 Z11 divided by three
- 10 A prime number
- 11 A square
- 12 Twice X8
- 14 Sixteen times Y8
- 15 Y7 minus half of Y12

Z Direction

- 1 Y14 minus X14
- 2 Five times a prime number
- 3 Three times a prime number
- 4 X1 times Y8
- 5 Z2 minus X4
- 6 Mean of X4 and Z11
- 8 Y12 minus Y8
- 11 Y1 minus Y10

Solution:

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