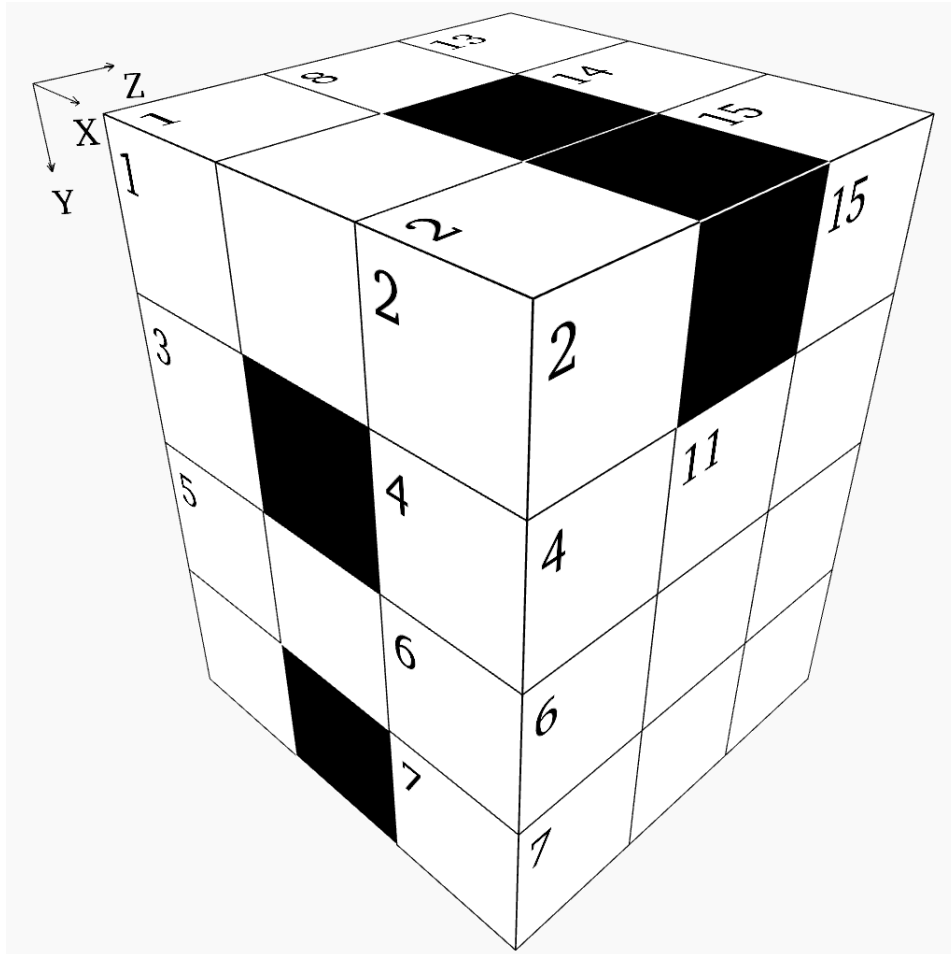


Box - Intermediate Puzzle #7



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

X Direction

- 1 Mean of Z6 and X5
- 5 A prime number
- 9 Nineteen times a square
- 12 Y13 minus Z7
- 13 Twice a prime number
- 16 A prime number
- 17 A prime number

Y Direction

- 1 Y15 plus half of Y14
- 2 A prime number
- 8 X9 plus half of X13
- 11 Z1 minus half of Z10
- 13 Eighteen more than X13
- 14 Sixteen times a prime number
- 15 A prime number

Z Direction

- 1 A prime number
- 3 Five times a prime number
- 4 X13 minus X9
- 5 X1 minus Z4
- 6 Twenty-one more than Y8
- 7 A prime number
- 10 Consecutive digits in descending order

Solution:

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