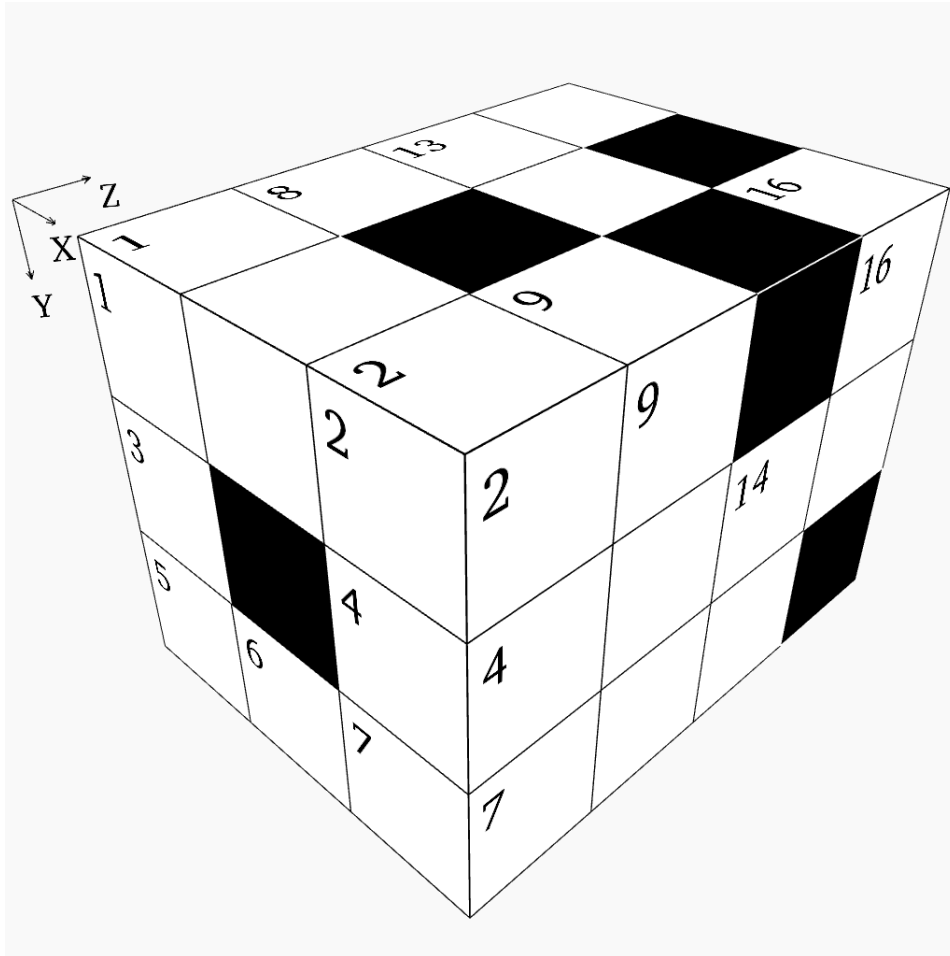


Box - Intermediate Puzzle #22



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

X Direction

- 1 Z3 plus X12
- 5 Eight times a prime number
- 10 Z6 minus Z5
- 12 Y16 plus Z7
- 13 Z3 reversed
- 15 A square
- 17 Consecutive digits in ascending order
- 18 A prime number

Y Direction

- 1 X12 plus X17
- 2 Eighty-four times a prime number
- 8 Forty-one times X13
- 9 X12 minus X15
- 11 X10 minus X15
- 14 Twice the result of X5 minus X1
- 16 Consecutive digits in descending order
- 17 Z2 minus X13

Z Direction

- 1 X15 plus Z5
- 2 Six less than X15
- 3 X15 minus half of Y16
- 4 Six times a prime number
- 5 Twice the result of Z4 plus Y9
- 6 Z1 plus Y11
- 7 Thirty-two times X13

Solution:

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