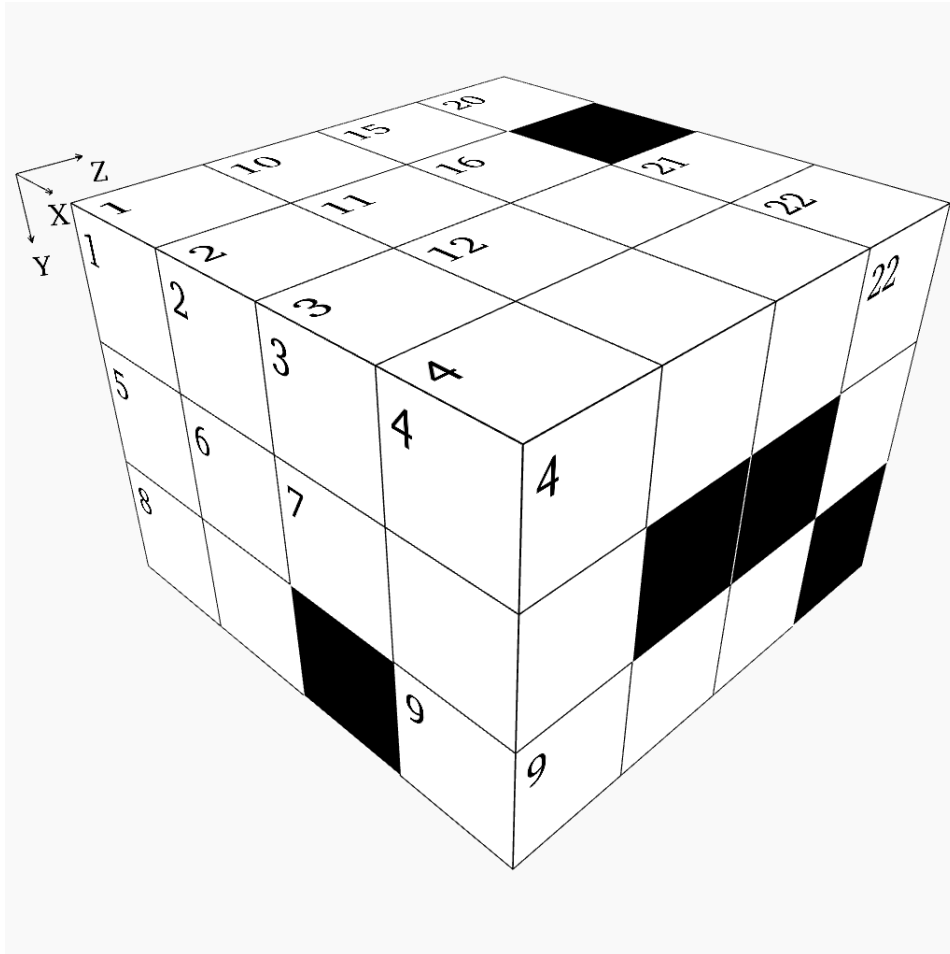


Box - Intermediate Puzzle #14



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	4	10	11	12		15	16			20		21	22
5	6	7			13			17				23	24		
8			9			14		18	19			25			

X Direction

- 1 Y12 times X21
- 5 Z9 plus X18
- 8 X14 minus Z17
- 10 Seventy-three times a prime number
- 13 Same as Z7
- 14 A square
- 15 A prime number
- 17 Y22 divided by seven
- 18 Z6 plus half of Z9
- 21 A cube
- 23 X1 minus half of Z2
- 25 Twice the result of Y24 minus X17

Y Direction

- 1 All digits are the same
- 2 Seventeen times X25
- 3 Same as Y11
- 4 Mean of Y1 and X8
- 11 Twice the result of Y12 minus Z7
- 12 Y16 minus Y2
- 15 Y2 minus Y12
- 16 Nineteen times a prime number
- 20 Eight times Y12
- 21 Mean of X8 and Y24
- 22 X23 divided by thirty-one
- 24 Mean of Y21 and X14

Z Direction

- 1 Sixteen times a prime number
- 2 Y20 minus X14
- 3 Twice the result of X15 minus Z1
- 4 Sixty-three times a prime number
- 6 A prime number
- 7 Y24 plus Y21
- 8 Twice the result of Z4 plus X13
- 9 Six times a prime number
- 14 X17 plus Y21
- 17 Z19 minus X13
- 19 X21 reversed

Solution:

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