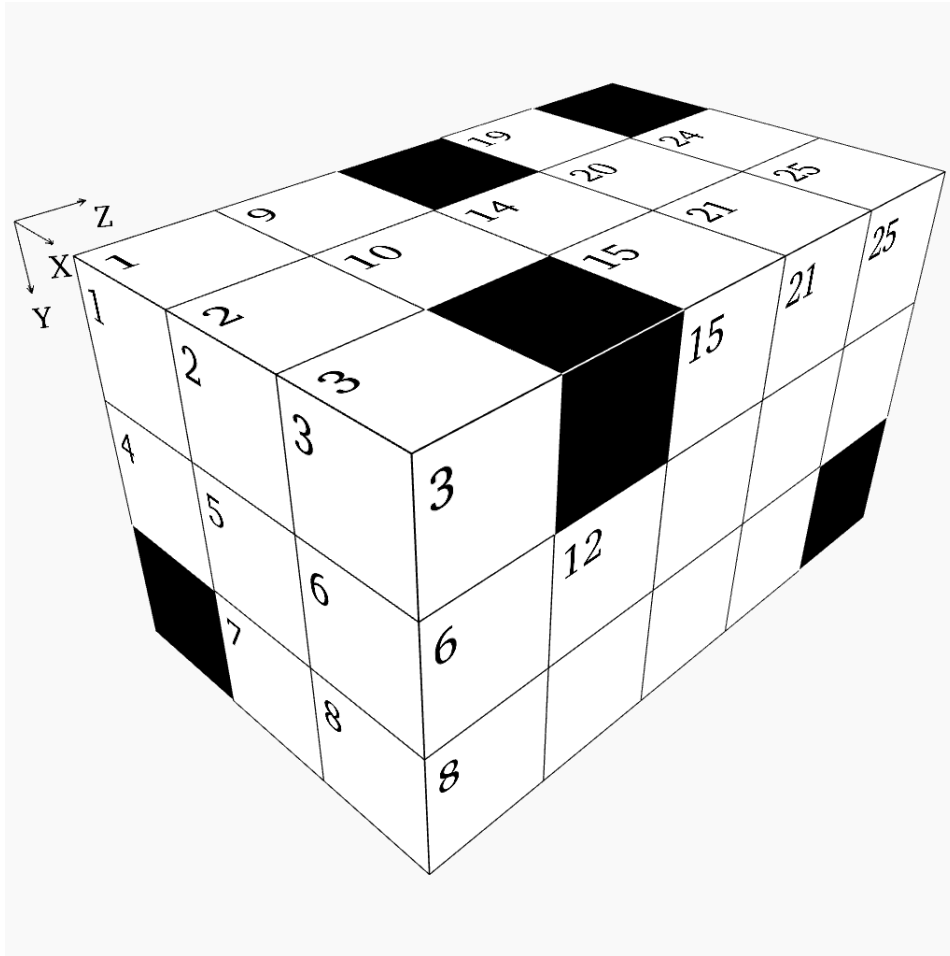


Box - Intermediate Puzzle #36



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	9	10			14	15	19	20	21		24	25
4	5	6	11		12		16		22			26		
	7	8	13			17	18		23			27		

X Direction

- 1 Y2 minus Y15
- 4 Consecutive digits unordered
- 7 Y26 minus X9
- 9 Half of Y25
- 11 Twice a prime number
- 14 X27 minus Y10
- 16 Three-fourths of Z22
- 17 A prime number
- 19 Mean of X1 and X14
- 22 A prime number
- 23 X9 plus X19
- 24 Z4 divided by seven
- 27 A square

Y Direction

- 1 X24 plus X27
- 2 Mean of X22 and X7
- 3 Seventy-one times X14
- 9 Twice the result of X11 minus Y20
- 10 X7 reversed
- 12 Twice X14
- 14 X23 minus X27
- 15 Mean of Y26 and Y19
- 19 Twice Z22
- 20 Twenty-eight times X27
- 21 Rearranged digits of X22
- 25 Mean of Y12 and Y26
- 26 Twice a prime number

Z Direction

- 1 Z22 divided by three
- 2 Its digits total X24
- 4 Mean of X9 and Y14
- 5 Ninety times a prime number
- 6 Ninety-six times a prime number
- 8 Y3 plus half of X4
- 13 Twice a prime number
- 15 Mean of X1 and X7
- 18 Mean of X4 and Z1
- 22 Z6 divided by X17

Solution:

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