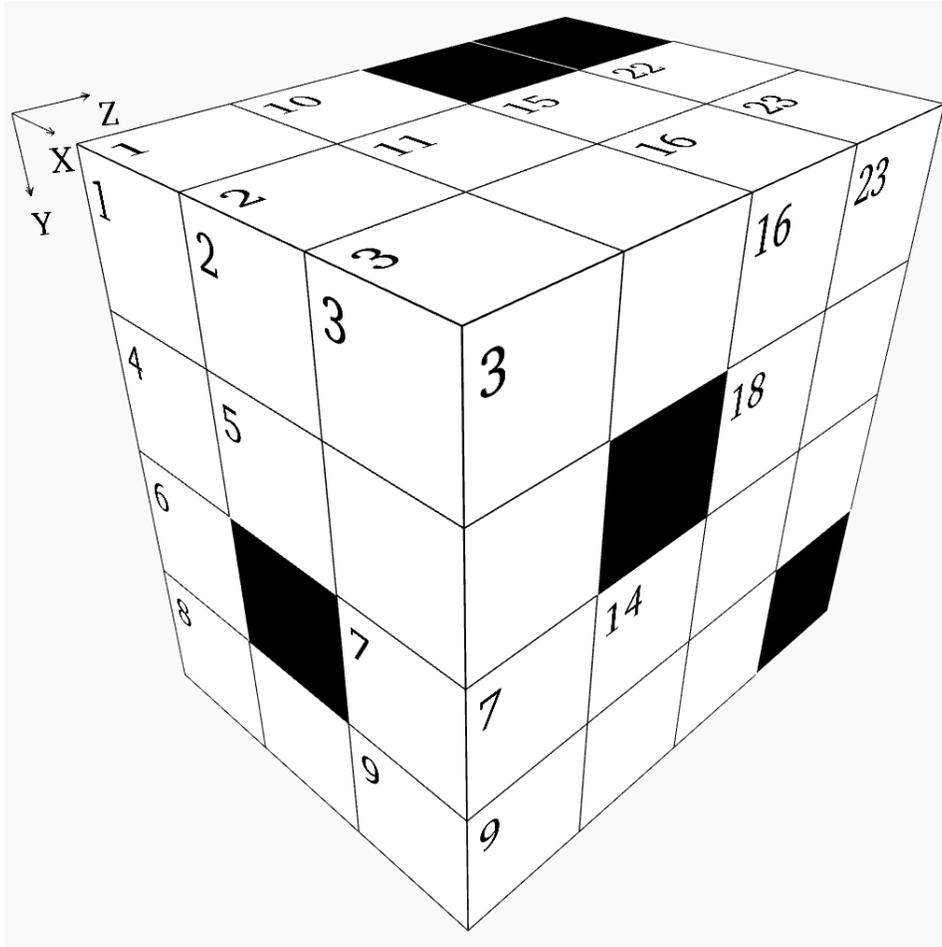


Box - Intermediate Puzzle #44



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

X Direction

- 1 X8 minus half of X26
- 4 Rearranged digits of X25
- 8 A cube
- 10 Twice the result of Y11 minus X4
- 12 Y2 times Z6
- 15 Y16 divided by X25
- 17 Mean of Z6 and Y14
- 19 Nine times Z6
- 20 Ten times X26
- 22 A prime number
- 24 Half of Y22, then subtract Z5
- 25 Twice a prime number
- 26 A square

Y Direction

- 1 A prime number
- 2 Z13 divided by thirty-eight
- 3 Three times a prime number
- 11 Twice a prime number
- 12 X12 divided by Y2
- 14 Z9 divided by ten
- 15 Twice a prime number
- 16 Thirty times a prime number
- 22 Four times a prime number
- 23 Twenty-four more than X24
- 24 Seventy-eight times Z18

Z Direction

- 1 Same as Y14
- 2 Mean of Z7 and X20
- 3 Seventy-nine times X17
- 5 Twenty times X10
- 6 Sum of digits in Y1
- 7 Four times a prime number
- 8 Twice a prime number
- 9 Ten times Z1
- 13 Y14 plus half of Y23
- 18 Mean of Y12 and Y2
- 21 Z1 plus Y2

Solution:

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