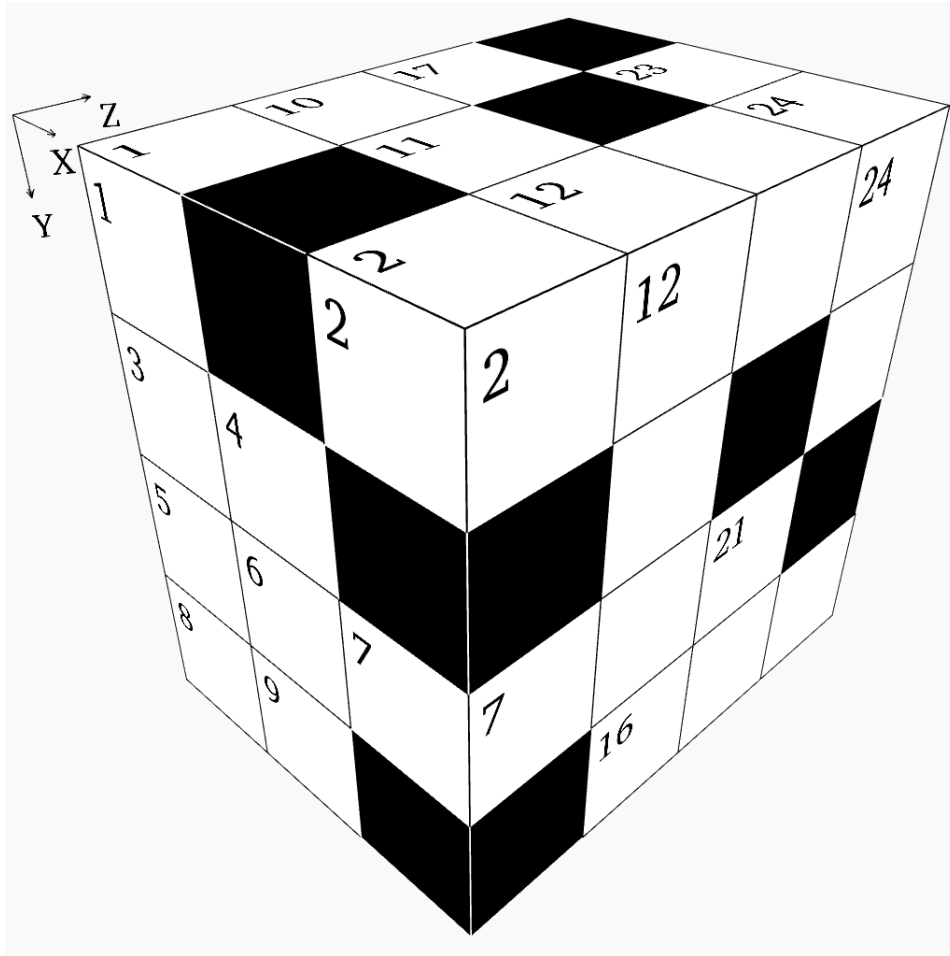


Box - Intermediate Puzzle #23



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	10	11	12	17				23	24
3	4			13		18	19		25		
5	6	7	14			20		21	26		
8	9		15		16	22					

X Direction

- 3 Z9 divided by sixteen
- 5 Z2 divided by Y24
- 8 Z4 divided by Z9
- 10 Z18 plus X22
- 13 X26 minus Y14
- 14 X10 plus half of Y23
- 15 A prime number
- 18 Consecutive digits in descending order
- 20 Z8 minus Z5
- 22 Mean of Z18 and Z1
- 23 Z1 minus half of Z18
- 25 Z7 minus X22
- 26 Consecutive digits in ascending order

Y Direction

- 1 Eight times a prime number
- 4 A cube
- 11 One thousand five hundred ninety-three more than Y12
- 12 Its digits total X3
- 14 Four-fifths of X23
- 17 Sixty-three times a prime number
- 19 Thirty-four times a square
- 21 X5 divided by five
- 23 Thirty-two times a prime number
- 24 Mean of X22 and X3
- 25 X14 minus X8

Z Direction

- 1 Twenty less than Z16
- 2 Consecutive digits unordered
- 4 Forty times Z16
- 5 A prime number
- 6 Forty-six times Y21
- 7 A cube
- 8 Seven times a prime number
- 9 Fifteen times a square
- 16 Mean of X15 and Y21
- 18 Twice a prime number

Solution:

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