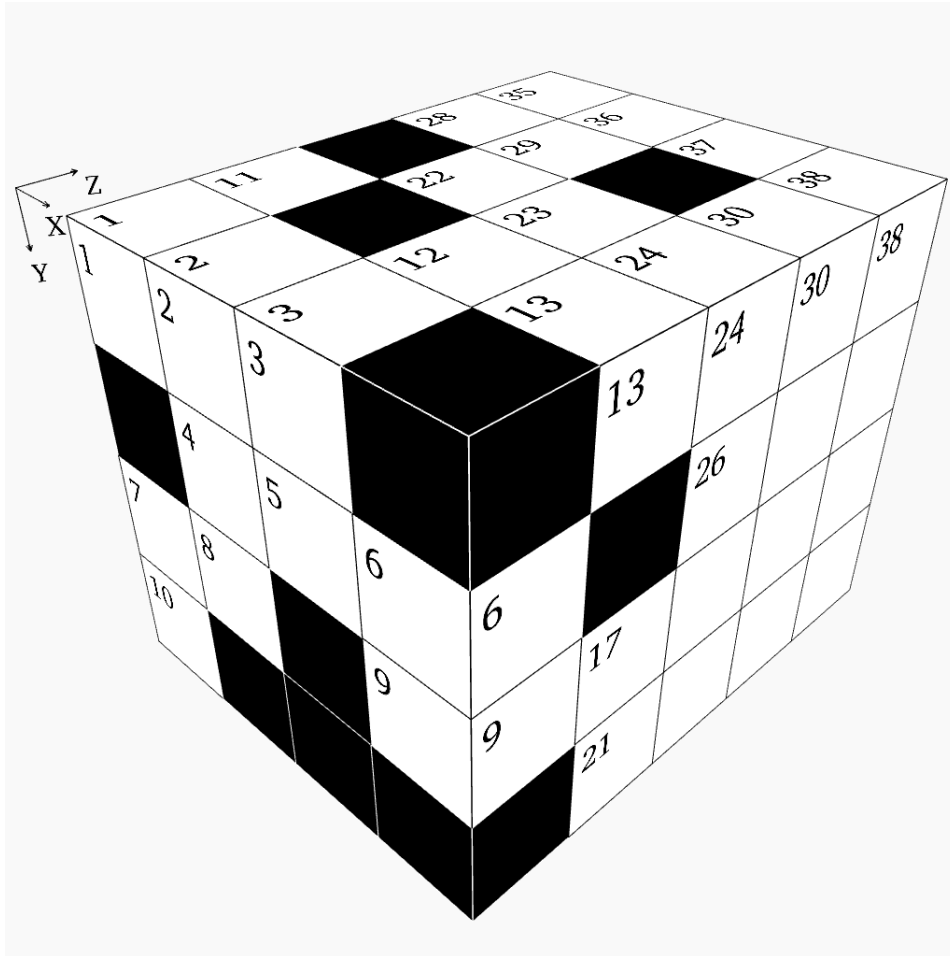


Difficulty: ★★☆☆☆

Box - Challenging Puzzle #75



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

28	29		30	35	36	37	38
31				39			
32		33		40			
34				41			

X Direction

- 1 Mean of Y29 and Z33
- 4 Six times a prime number
- 7 Y17 reversed
- 12 Y15 minus X14
- 14 Z9 divided by Z1
- 16 Thirty-three times a prime number
- 18 Forty-eight times a prime number
- 22 Z26 reversed
- 25 Seventeen times a prime number
- 27 Fifty-four times Z33
- 28 X14 divided by fifty-one
- 31 A square
- 32 Y35 minus Z22
- 34 Seventy-eight times a prime number
- 35 First two digits are the same as Z32
- 39 Twice a prime number
- 40 Sixty-eight times a prime number
- 41 Three times a prime number

Y Direction

- 2 X25 minus half of Y7
- 3 Z33 minus Y7
- 6 Mean of Y7 and Z7
- 7 Z32 minus Y17
- 11 Twenty-nine times a square
- 12 Thirty-two times a prime number
- 15 Thirty-nine times a square
- 17 Z8 divided by X4
- 22 Ninety-nine times X7
- 23 X35 minus X39
- 24 Mean of Z5 and X39
- 28 Sixty-four times Y3
- 29 Mean of X16 and X28
- 30 Twice the result of X27 plus Z26
- 33 Consecutive digits in descending order
- 35 Sixty-nine times X31
- 36 Consecutive digits unordered
- 37 Forty-five times a prime number
- 38 Three times a prime number

Z Direction

- 1 Z28 plus X7
- 3 Z14 minus Z19
- 4 A prime number
- 5 Sixty-five times Y17
- 7 Z13 minus Y24
- 8 Eighty-four times a prime number
- 9 Last two digits are the same as last two digits of Z8
- 10 A square
- 13 Seventy-two times a prime number
- 14 X32 plus Y17
- 19 A prime number
- 20 Mean of Y38 and X22
- 21 Three times a prime number
- 22 Thirty-eight times X28
- 26 Twenty-six times Y17
- 28 Z33 minus Z32
- 32 Mean of Z33 and Y6
- 33 A prime number

