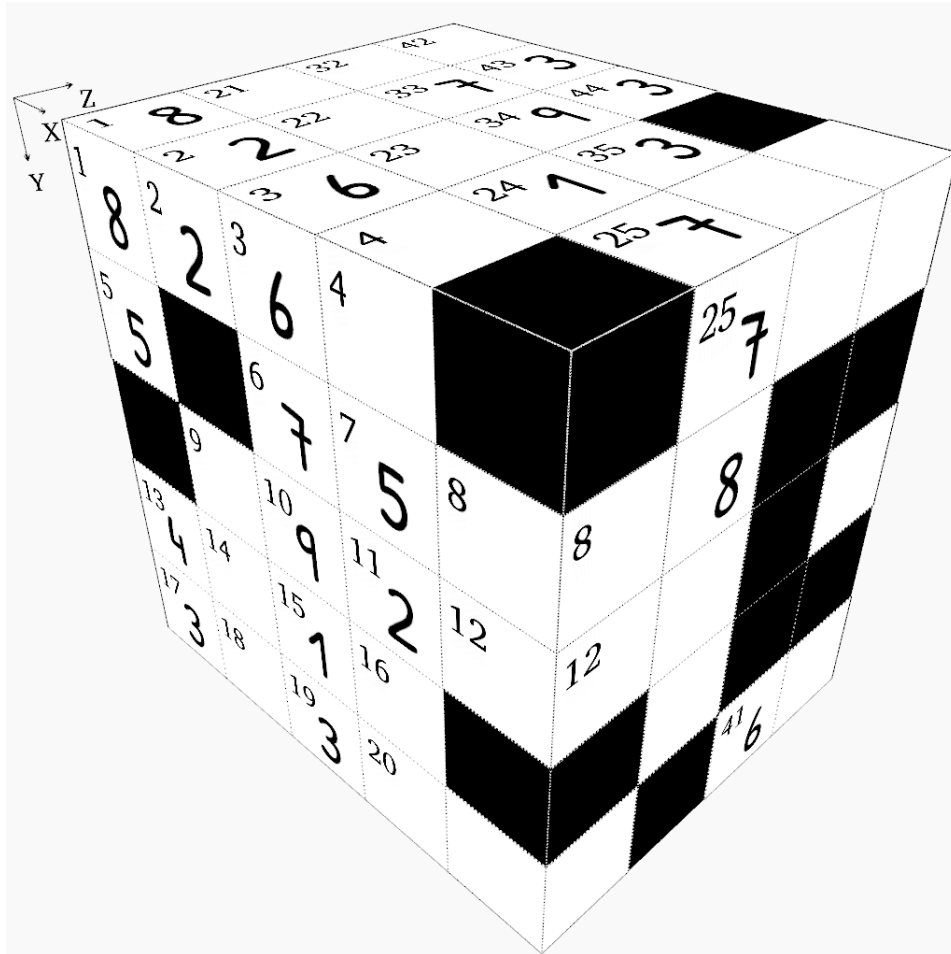


Difficulty: ☆☆☆☆☆

Box - Beginner Puzzle #39



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 8	2 2	3 6	4		21	22	23	24 1	25 7	32	33 7	34 9	35 3	
5 5		6 7	7 5	8	26	27 8	4		8	36 7		4		
	9	10 9	11 2	12	28		29 5			37	38			
13 4	14	15 1	16			30	7	2		39		0		
17 3	18	19 3	20		31 9					40				41 6
					42	43 3	44 3							
					45 4		46 4							
					47			2						
					48	1	3							
					49 4	6								

X Direction

- 1 Twice a prime number
- 6 Rearranged digits of Y9
- 9 Eight times a prime number
- 13 Z17 plus Y9
- 17 Y32 minus half of Z7
- 21 Seven times a prime number
- 26 Twelve times a prime number
- 29 Twice a prime number
- 30 Z1 plus Z16
- 31 Two thousand one hundred ninety-five more than Z6
- 32 Y32 minus Z41
- 36 Thirty-seven times a prime number
- 37 Two thousand seventy more than Y25
- 40 Ten thousand seven hundred eighty-nine more than X17
- 42 A prime number
- 45 All digits are the same
- 47 Forty-seven times a prime number
- 48 Fifty-one times a square
- 49 Forty-two times a prime number

Y Direction

- 1 Mean of Y8 and Z16
- 3 Twenty thousand five hundred fifteen less than X26
- 4 Mean of X47 and Y23
- 8 Mean of Z41 and Z16
- 9 Z27 minus half of Z14
- 13 Half of Y30
- 21 Y9 minus Z16
- 22 Consecutive digits in descending order
- 23 A prime number
- 24 Mean of Y35 and Y42
- 25 One thousand two hundred ninety-one more than Z3
- 30 Mean of Z14 and Z39
- 32 Last two digits are the same as Z39
- 33 A prime number
- 34 Six thousand seventy-three more than X26
- 35 Twice a prime number
- 42 Mean of X40 and Z19
- 43 Four times a prime number
- 44 Three-fourths of X40
- 46 A prime number

Z Direction

- 1 Two thousand thirty-nine more than Z3
- 2 Three times a prime number
- 3 Z5 plus Y33
- 4 Z25 minus Z38
- 5 Z20 plus half of X37
- 6 Four times a prime number
- 7 Sixty-six times a prime number
- 8 Same as Z14
- 10 Seventy-six times a prime number
- 11 Sixty-two times a prime number
- 12 Mean of Z8 and Y22
- 14 Mean of Z41 and Z16
- 15 Mean of Z39 and Z19
- 16 Z19 divided by thirty-six
- 17 Last two digits are the same as last two digits of Z6
- 18 Twice a prime number
- 19 Mean of X29 and Z18
- 20 Consecutive digits unordered
- 25 Twelve times a prime number
- 27 Z38 plus Y33
- 28 Mean of Z25 and Y30
- 38 Mean of Y22 and Z16
- 39 Twice a prime number
- 41 A cube

Solution:

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

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