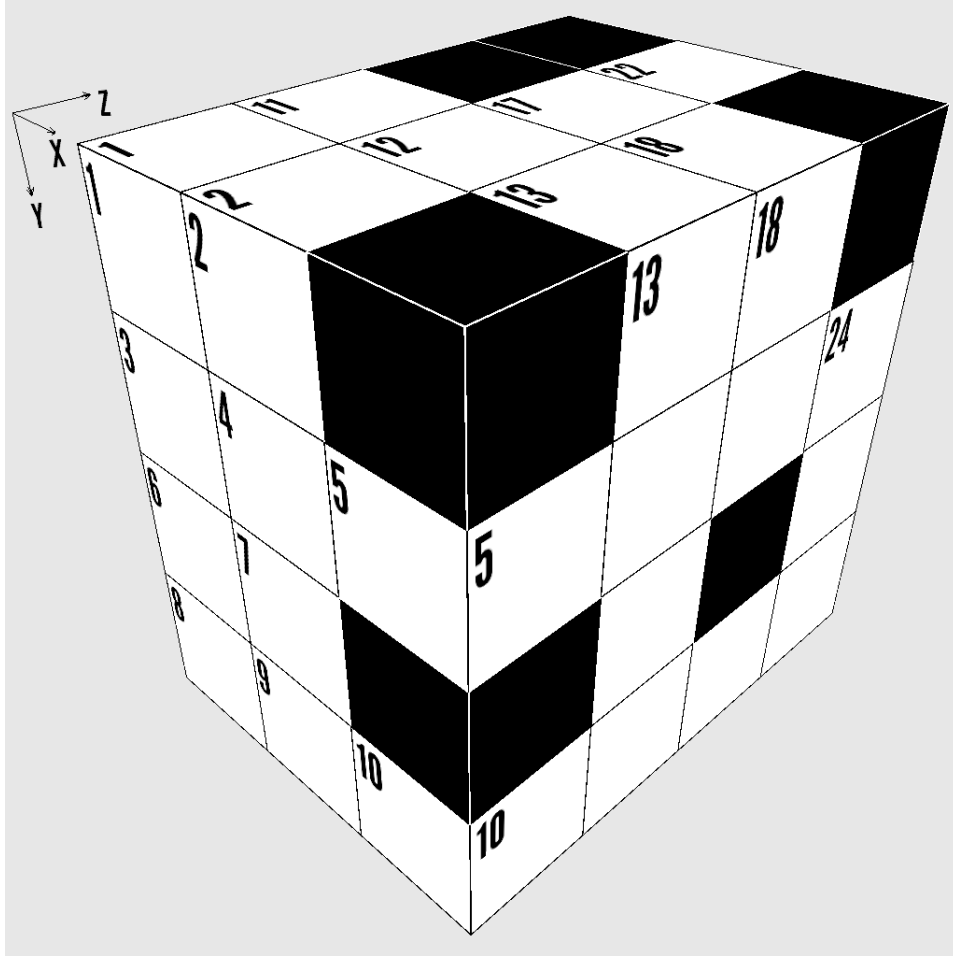


Difficulty: ★★☆☆☆

3D Math Puzzle - 3x4x4 Box 38



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" read from:
 - a. X Direction: Left to right
 - b. Y Direction: Top to bottom
 - c. Z Direction: Front to back
3. There is one unique solution which satisfies all the clues given below.
4. Some "words" may not have clues. They will be determined by the "words" which intersect them.

If we take the cube pictured above and divide it into individual X-Y layers, we will get these planes:

1	2		11	12	13		17	18		22	
3	4	5	14			19			23		24
6	7		15			20			25		
8	9	10	16			21			26		

Clues:

X Direction

- 1 Digits are the same as first two digits of Y1
- 3 First two digits are the same as first two digits of Y2
- 6 Is a prime number
- 8 First two digits are the same as first two digits of X19
- 11 First two digits are the same as X6
- 14 First two digits are the same as first two digits of X15
- 15 Eight times a prime number
- 16 Ten times X6
- 17 Digits are the same as last two digits of Z2
- 19 Z7 minus Z2
- 20 Digits are the same as last two digits of Y1
- 21 Half of X14
- 23 Is a prime number
- 25 Is a prime number
- 26 Twice a prime number

Y Direction

- 1 Y22 minus Z3
- 2 Z1 plus Z3
- 11 Last two digits are the same as Y18
- 12 First two digits are the same as first two digits of Z7
- 13 Forty times a prime number
- 17 Seventy times a prime number
- 18 X14 minus X23
- 19 Digits are the same as first three digits of Z8
- 22 Ninety-eight times a prime number
- 23 Forty-one times Z13
- 24 Nineteen times X17

Z Direction

- 1 Average of X6 and X20
- 2 Last two digits are the same as last two digits of Z8
- 3 Twenty-one times a prime number
- 4 Last two digits are the same as last two digits of X8
- 5 Nine times a prime number
- 6 Last two digits are the same as X6
- 7 Seven times a prime number
- 8 Last two digits are the same as X17
- 9 Is a square
- 10 Fourteen times a prime number
- 13 Twice a square

Solution is on next page

Solution:

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