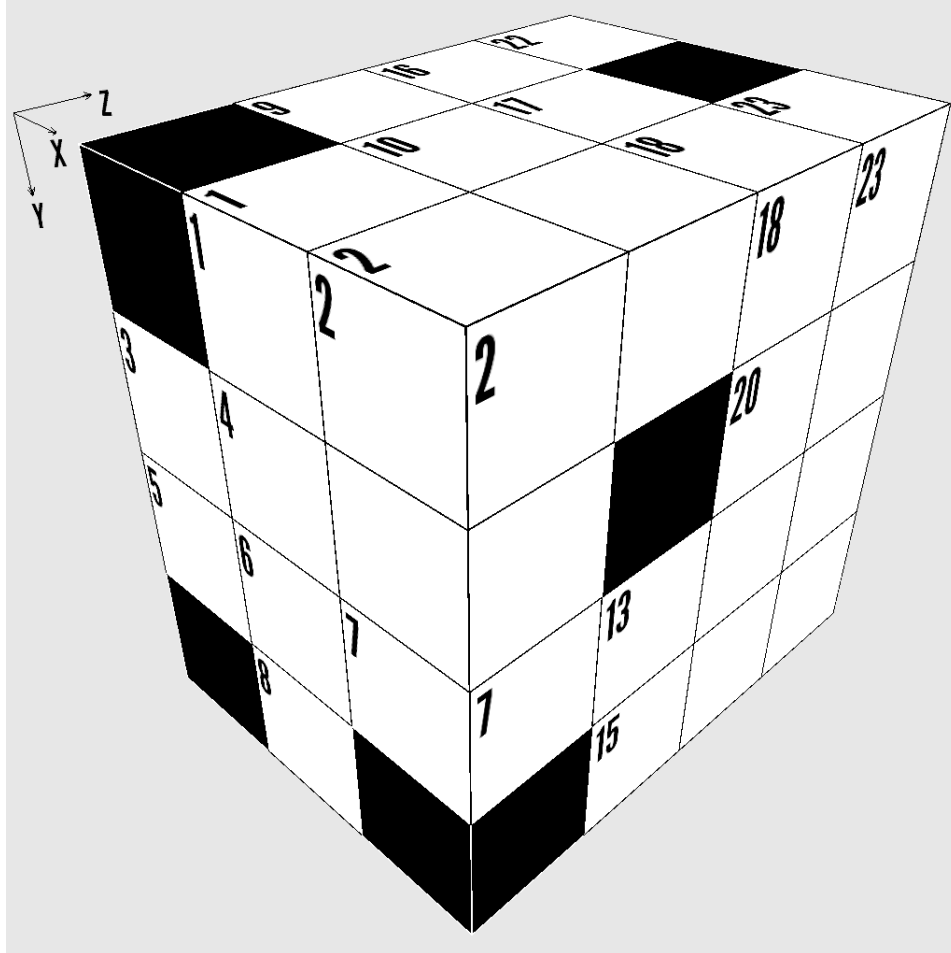


Difficulty: ★★☆☆☆

3D Math Puzzle - 3x4x4 Box 36



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	9	10		16	17	18	22		23
3	4		11			19		20	24	25	
5	6	7	12		13	21			26		
	8		14		15				27		

Clues:

X Direction

- 1 Digits are in consecutive order
- 3 Last two digits are the same as last two digits of X21
- 5 X3 plus Y13
- 9 Ten times a prime number
- 11 Y25 minus Z9
- 12 Twice a prime number
- 14 Twice Z8
- 16 Is a prime number
- 19 Y23 minus X16
- 21 Last two digits are the same as last two digits of X26
- 24 First two digits are the same as first two digits of Z6
- 26 Last two digits are the same as last two digits of X3
- 27 X3 plus Z15

Y Direction

- 1 First two digits are the same as first two digits of X26
- 2 First two digits are the same as first two digits of Z2
- 3 Digits are in consecutive order
- 9 Eighty-seven times a prime number
- 10 Twenty-three times a prime number
- 13 Z7 reversed
- 16 Digits are in consecutive order
- 17 Five times a prime number
- 18 Is a prime number
- 22 First two digits are the same as first two digits of Z1
- 23 Three times a prime number
- 25 Twice a prime number

Z Direction

- 1 Fifteen times a square
- 2 Last two digits are the same as last two digits of Z15
- 3 Thirty-three times a prime number
- 4 Nineteen times a prime number
- 5 Last two digits are the same as Z8
- 6 Thirty-five times a prime number
- 7 Three times a square
- 8 X1 reversed
- 9 Rearranged digits of Y16
- 15 Is a prime number
- 20 Same as Y13

Solution is on next page

Solution:

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