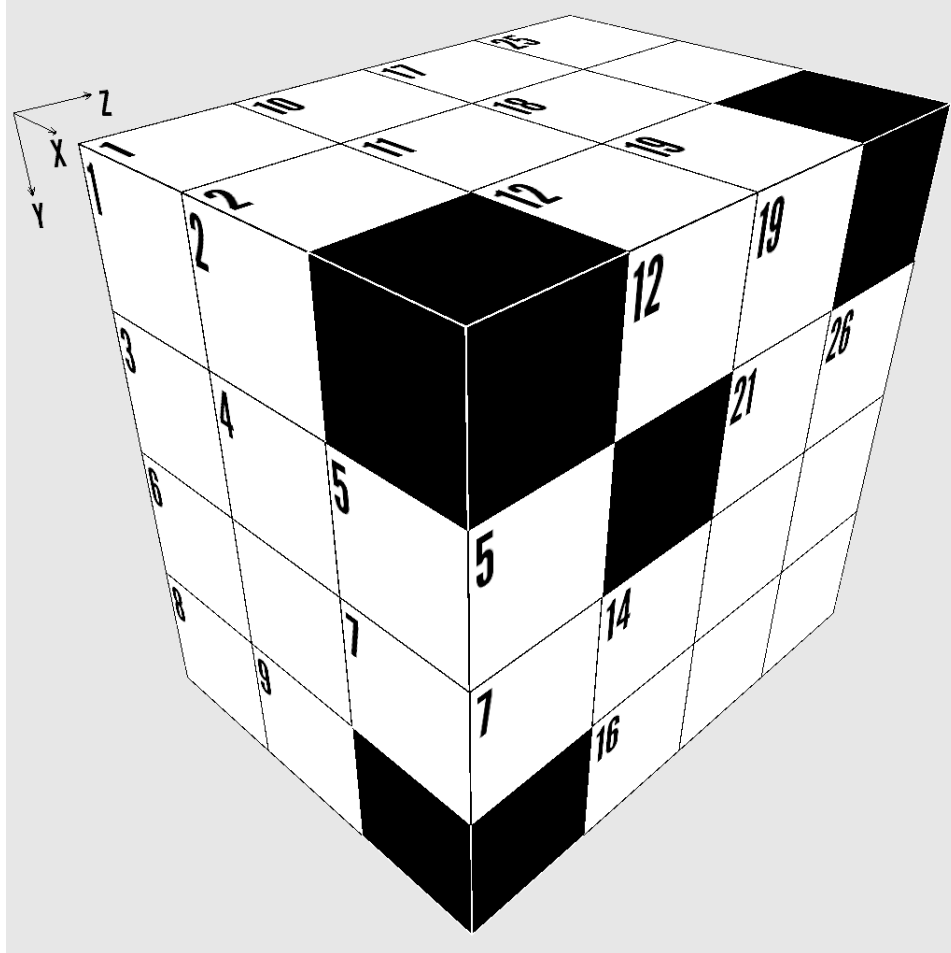


Difficulty: ★★☆☆☆

3D Math Puzzle - 3x4x4 Box 17



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		10	11	12	17	18	19	25		
3	4	5	13			20		21			26
6		7			14	22	23			27	
8	9		15		16	24			28		

Clues:

X Direction

- 1 Is a square
- 3 First two digits are the same as Y27
- 6 Two-thirds of X28
- 8 Digits are in consecutive descending order
- 10 Last two digits are the same as Z21
- 13 Is a prime number
- 15 Last two digits are the same as X13
- 17 Is a prime number
- 20 Is a prime number
- 22 Twice Y25
- 24 Eleven times Y5
- 25 Digits are in consecutive order
- 27 Digits are the same as first two digits of Y26
- 28 Eighteen times a prime number

Y Direction

- 1 Five times a square
- 2 Z8 minus Y27
- 5 X1 reversed
- 10 Twenty-nine times Z21
- 11 Z1 divided by X1
- 14 Digits are the same as last two digits of X17
- 17 First three digits are the same as X17
- 18 First two digits are the same as first two digits of X20
- 19 Twice a prime number
- 25 Digits are the same as first two digits of X24
- 26 Thirty-eight times Z23
- 27 X24 minus X20

Z Direction

- 1 Ninety-one times X1
- 2 Last two digits are the same as X25
- 3 Last two digits are the same as Y25
- 4 Average of X6 and Z16
- 6 X24 minus Y11
- 7 Four times X3
- 8 First two digits are the same as X8
- 9 First two digits are the same as first two digits of X15
- 12 Is a prime number
- 16 Eight times Z23
- 21 X1 plus X13
- 23 Is a square

Solution is on next page

Solution:

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