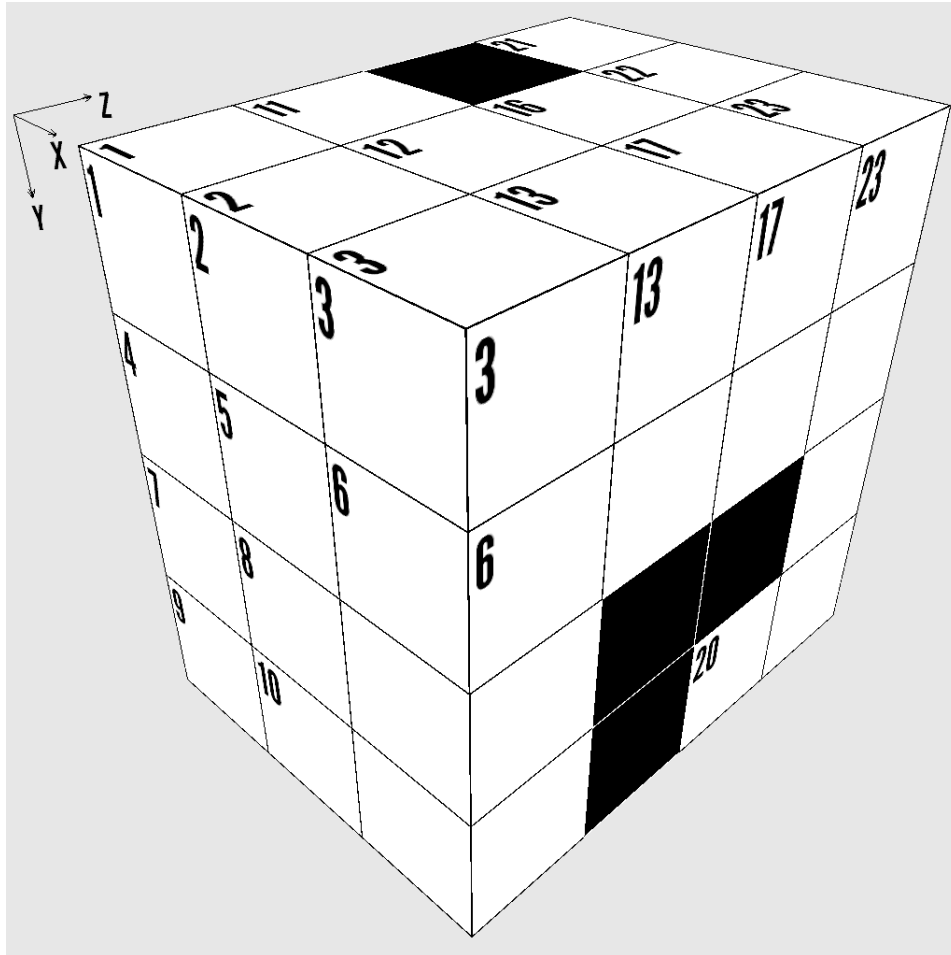


Difficulty: ★★☆☆☆

3D Math Puzzle - 3x4x4 Box 25



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

Clues:

X Direction

- 1 First two digits are the same as first two digits of Z2
- 4 One-fifth of X18
- 7 Last two digits are the same as Y21
- 9 First two digits are the same as first two digits of Y3
- 11 First two digits are the same as first two digits of Y11
- 14 Is a prime number
- 15 Digits are the same as first two digits of Y18
- 16 Digits are in consecutive order
- 18 Thirteen times X16
- 19 X9 plus X25
- 21 First two digits are the same as Y21
- 24 Is a prime number
- 25 Is a prime number
- 26 Is a prime number

Y Direction

- 1 First two digits are the same as first two digits of Y2
- 2 Last three digits are the same as X4
- 3 Twenty times a prime number
- 11 Last two digits are the same as X16
- 12 First two digits are the same as first two digits of X14
- 13 One-third of X4
- 16 Same as Z1
- 17 Z7 reversed
- 18 Thirteen times Y13
- 21 Sum of the digits of X1
- 22 Ten times X14
- 23 Last two digits are the same as Z19

Z Direction

- 1 Three times a square
- 2 Forty-four times X26
- 3 Sixteen times a prime number
- 4 First two digits are the same as first two digits of X21
- 5 Z4 minus Z19
- 6 Is a prime number
- 7 Eleven times X15
- 8 Digits are in consecutive descending order
- 10 Five hundred ninety-one less than Z6
- 19 Is a prime number
- 20 Is a prime number

Solution is on next page

Solution:

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