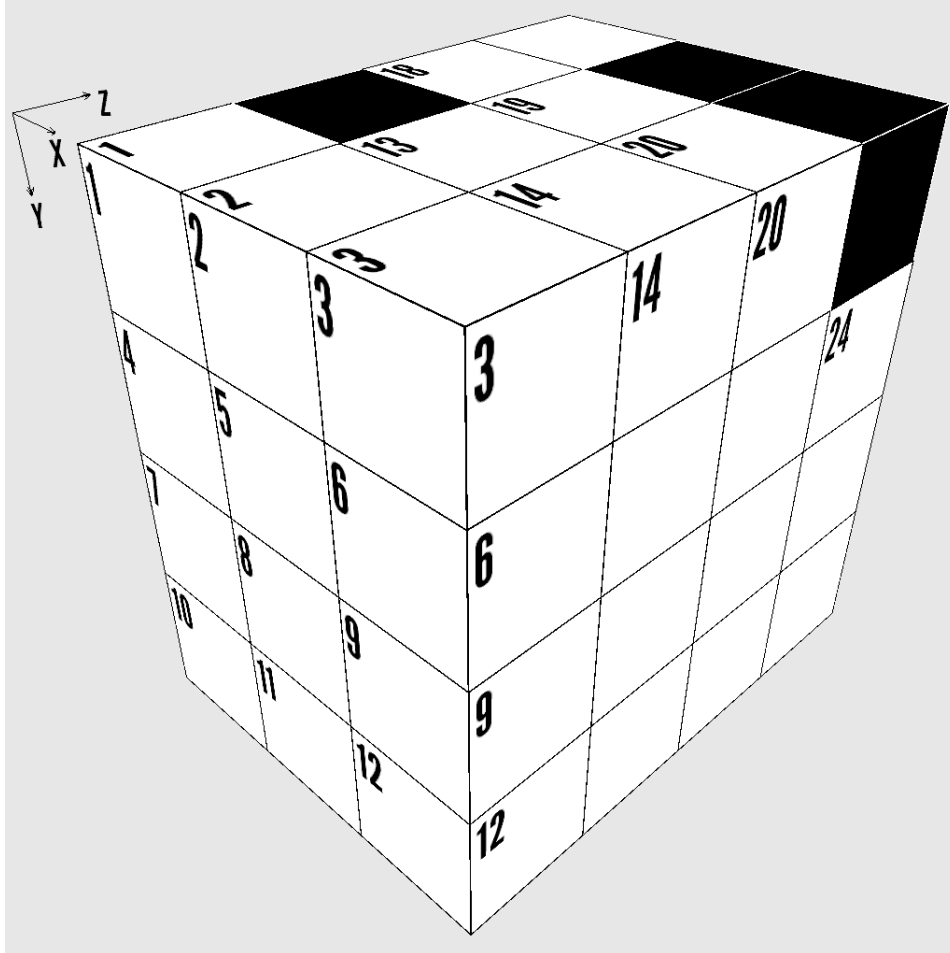


Difficulty: ★★☆☆☆

3D Math Puzzle - 3x4x4 Box 5



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

Clues:

X Direction

- 1 First two digits are the same as first two digits of Y1
- 4 First two digits are the same as first two digits of Y2
- 7 Eleven times X13
- 10 Last two digits are the same as last two digits of Y19
- 13 Digits are the same as last two digits of Y15
- 15 Is a prime number
- 16 Is a prime number
- 17 Is a prime number
- 18 Last two digits are the same as last two digits of Y1
- 21 First two digits are the same as first two digits of Y19
- 22 Last two digits are the same as last two digits of Z2
- 23 Is a prime number
- 25 Z3 minus Z10
- 26 Is a prime number

Y Direction

- 1 Twenty-six times a prime number
- 2 Is a prime number
- 3 Ninety-five times Z11
- 13 Z12 plus Z18
- 14 First two digits are the same as first two digits of Z9
- 15 First two digits are the same as first two digits of Z2
- 18 Last two digits are the same as last two digits of X17
- 19 Last two digits are the same as Z11
- 20 Seventeen times a prime number
- 23 X17 minus Z11
- 24 Last two digits are the same as last two digits of Z6

Z Direction

- 2 Average of X13 and X18
- 3 Twice a square
- 4 First two digits are the same as first two digits of X4
- 5 First two digits are the same as first two digits of X15
- 6 Seventeen times X17
- 7 Is a prime number
- 8 Twice a prime number
- 9 Seventy-six times a prime number
- 10 Digits are the same as first two digits of X26
- 11 Digits are the same as last two digits of X10
- 12 First two digits are the same as first two digits of X7
- 18 All digits are the same

Solution is on next page

Solution:

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