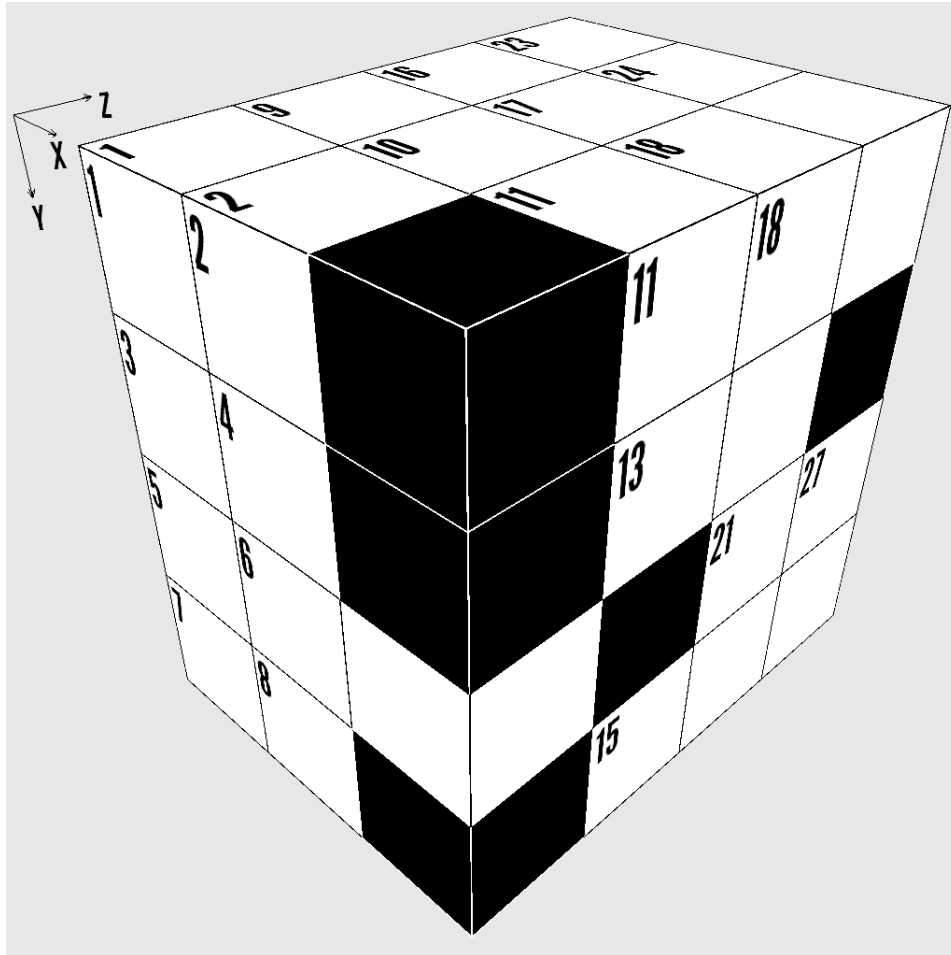


Difficulty: ★★☆☆☆

## 3D Math Puzzle - 3x4x4 Box 58



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

**Clues:**

**X Direction**

- 1 X26 minus X16
- 3 One-fourth of X19
- 5 X9 minus X19
- 7 Is a prime number
- 9 Digits are in consecutive order
- 12 Is a prime number
- 14 Eighteen times X3
- 16 First two digits are the same as first two digits of Z6
- 19 Last two digits are the same as last two digits of Z1
- 20 X16 plus Y27
- 22 Thirty times X3
- 23 Four times X7
- 25 Digits are the same as first two digits of X23
- 26 Thirteen times Y27
- 28 Is a prime number

**Y Direction**

- 1 First two digits are the same as first two digits of Y2
- 2 Is a prime number
- 9 Digits are in consecutive descending order
- 10 Z7 plus Z20
- 11 Is a prime number
- 16 First two digits are the same as Y27
- 17 Seven times a prime number
- 18 One thousand eight hundred sixty-eight more than Y24
- 23 Five times a prime number
- 24 Sixty-two times Y11
- 27 Is a prime number

**Z Direction**

- 1 Twenty-eight times a prime number
- 2 Last two digits are the same as X25
- 3 Last two digits are the same as Z13
- 4 Last two digits are the same as Z20
- 6 One thousand one hundred fifty-two less than Y24
- 7 Five times a prime number
- 8 Eighty-three times X25
- 11 First two digits are the same as first two digits of Z2
- 13 Digits are in consecutive order
- 15 Is a prime number
- 20 Digits are in consecutive order
- 21 Is a prime number

**Solution is on next page**

Solution:

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